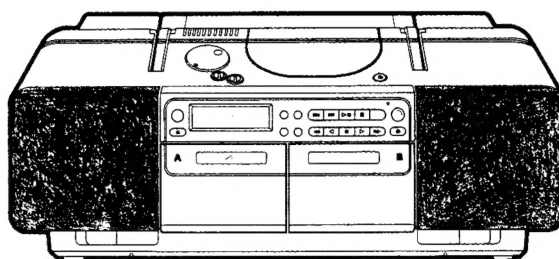
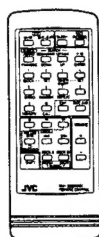


# JVC

## SERVICE MANUAL

### CD PORTABLE SYSTEM

## RC-B1<sub>B/E/G</sub>



**COMPACT**  
**disc**  
**DIGITAL AUDIO**

#### Area Suffix

B ..... U.K.  
E ..... Continental Europe  
G ..... Germany

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# 1 Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by (  $\triangle$  ) on the Schematic Diagram and Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

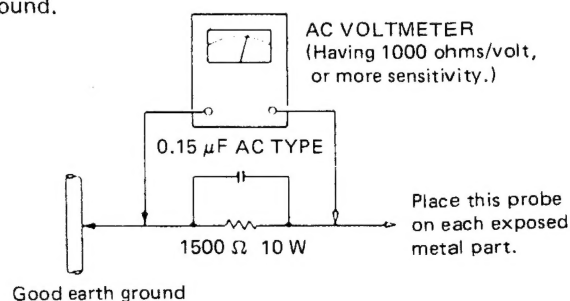
Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500  $\Omega$  10 W resistor paralleled by a 0.15  $\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



## Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

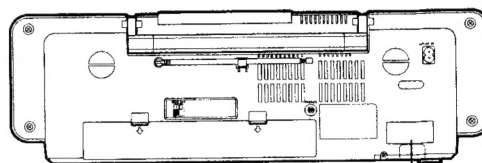
## 2 Safety Precaution About RC-B1

### IMPORTANT FOR LASER PRODUCTS PRECAUTIONS

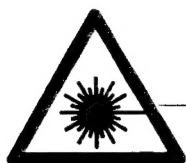
1. **CLASS 1 LASER PRODUCT**
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD door is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.

### REPRODUCTION OF LABELS AND THEIR LOCATION

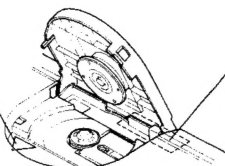
Rear side



Obs:  
Apparaten innehåller laser-  
komponent av högre laserklass  
än klass 1.

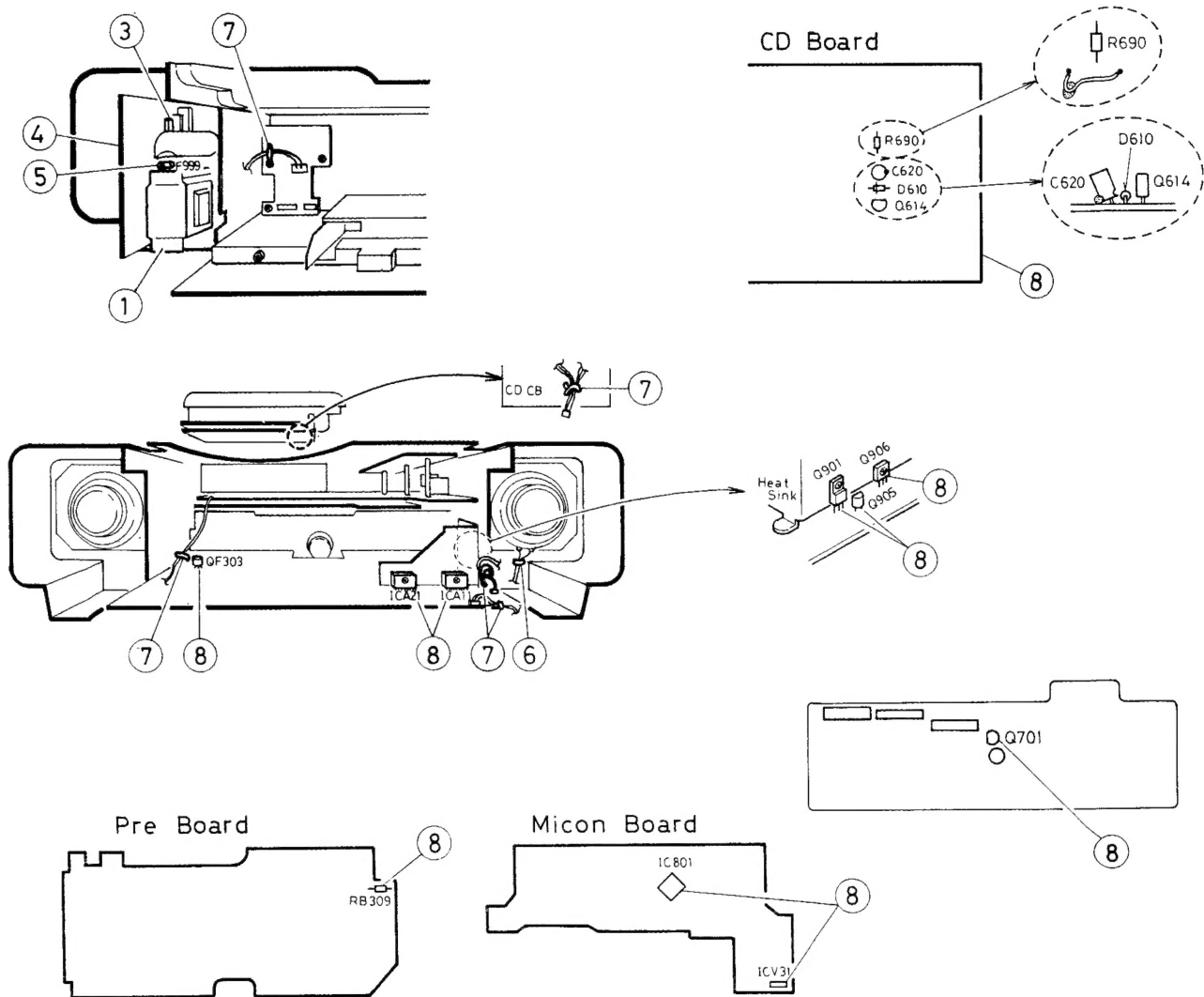


VAROITUS! Laite sisältää laserdiodin,  
joka lähettää näkymätöntä silmille  
vaarallista lasersäteilyä.



ADVARSEL-Der vil udstråles  
osynlig laserbestraling nar  
apparatet abnes og aflas-  
ningsmekanismen frigøres.  
UNDGA AT BLIVE UDSET  
FOR LASERBESTRALING.

DANGER-Invisible laser  
radiation when open and  
interlock defeated.  
AVOID DIRECT EX-  
POSURE TO BEAM



■ Important Points of Safety Management

- (Index numbers conform to those in the above figures.)
- ① Make sure to use a power transformer of the part number of FSTP57J2-12A, and securely tighten setscrews.
  - ② Make sure to use an AC socket having the marking of "HSC1466", as well as to check the pattern surface having no damage.
  - ③ Carefully arrange the primary and secondary terminals of the board and adjacent parts not to project over the ground for securing space around them.
  - ④ Make sure that parts backed to the board are securely fastened by spacers and bond, etc.
  - ⑤ Before installing the fuse, make sure to confirm its rating and markings shown on the packing as well as to check amperage shown on the board. Moreover, check the fuse holder to retain it securely.

- ⑥ Check that speaker wires near live parts are tightly clamped by the soldered point.
- ⑦ Carefully arrange and clamp wires, etc. as shown in the figure not to be neared to live parts, moving parts, heating parts, sharp-edged parts and so forth.
- ⑧ The following are heat generating parts. Pay careful attention to them not to contact with electrolytic capacitors and wires.
  - ICs : ICA11, ICA21, IC801, ICV31
  - Transistors : Q614, Q901, Q905, Q706
  - Diodes : D996 to D999, D610
  - Resistor : R610, RA101, RA201, RB309
  - Capacitor : C620 that must be retained by bond not to touch Q614
  - Heat sink :

Symbol No.	Rating	Indication on Board	Version
F997	T4A	T4AC	B/E



## 3 Features

1. **Simple and Modern Square-Shaped CD Portable System**  
Incorporating two 10 cm full-range speakers
2. **Multi-function CD player**
  - Capable of auto-edit and multi-edit recording and programmed play.
3. **31-key remote control unit operates the usual CD, cassette deck and tuner functions.**
  - Remote control controls power on/off switching, volume control, and a variety of editing functions.
4. **2-Band digital synthesizer tuner with 30-station (15 FM and 15 AM) preset capability.**
  - Seek/manual tuning.
5. **Double-cassette mechanism (Deck B for recording and playback, Deck A for playback).**
  - Metal and CrO<sub>2</sub> tape can be played back, for superior tone quality.
  - Synchro start dubbing function (normal/high speed dubbing).
  - Continuous play.
  - Auto tape select mechanism.
6. **Automatic source selection**
  - Mode selection is not necessary to start the playback of the required source.

## 4 Specifications

### Compact disc player section

Type	: Compact disc player
Signal detection system	: Non-contact optical pickup (semiconductor laser)
Number of channels	: 2 channels (stereo)
Frequency response	: 20 Hz — 20,000 Hz $+1$ $-3$ dB
Signal-to-noise ratio	: 76 dB
Wow & flutter	: Less than measurable limit

### Radio section

Frequency ranges	: FM 87.5 — 108 MHz AM (MW) 522 — 1629 kHz (LW) 144 — 288 kHz
Antennas	: Telescopic antenna for FM Ferrite core antenna for AM

### Tape deck section

Track system	: 4-track, 2-channel stereo
Motor	: Electronic governor DC motor for capstan
Heads	: Deck A: Hard permalloy head for playback × 1 Deck B: Hard permalloy head for recording/playback, 2 gap ferrite head for erasure (combination head) × 1
Frequency response	: 50 Hz — 15,000 Hz (with CrO <sub>2</sub> tape) 50 Hz — 14,000 Hz (with normal tape)
Wow & flutter	: 0.23% (WRMS)
Fast wind time	: Approx. 120 sec (C-60 cassette)

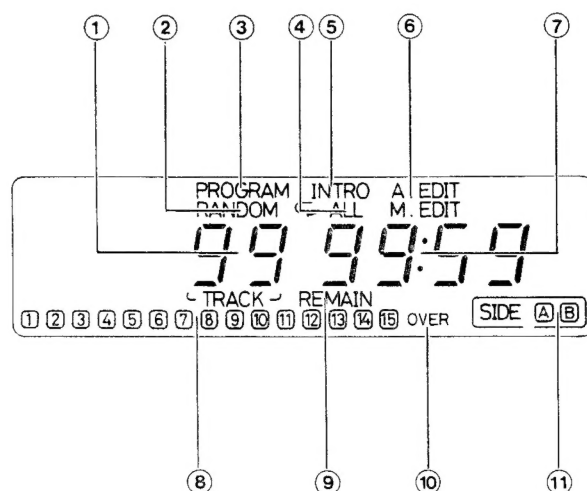
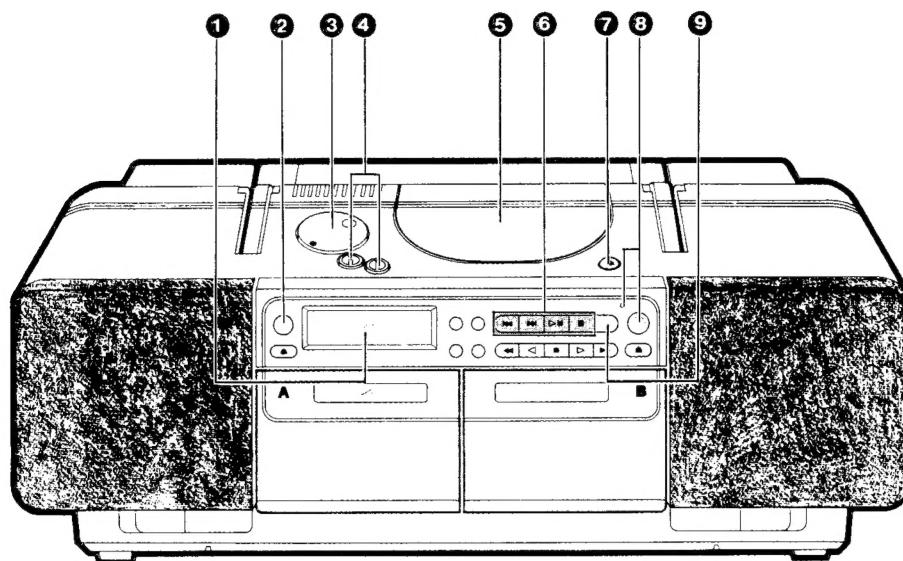
### General

Speakers	: 10 cm (8Ω) × 2
Power output	: Max. 18 W (9 W + 9 W) at 8 Ω 15 W (7.5 W + 7.5 W) at 8 Ω (with 10% total harmonic distortion)
Output terminals	: PHONES × 1 (Output level: 0 — 30 mW/32 Ω, Matching impedance: 8 Ω — 1 kΩ)
Power sources	: AC 240 V, 50/60 Hz (RC-B1 B) AC 230 V, 50/60 Hz (RC-B1 G) DC 12 V ("R20" cells × 8)
Power consumption	: 29 W (with Power SW ON) 3.0 W (with Power SW standby)
Dimensions	: 540 (W) × 171 (H) × 254 (D) mm including knobs
Weight	: Approx. 7.2 kg with batteries Approx. 6.2 kg without batteries
Accessories provided	: AC power cord Remote control unit (RM-RXB1001) Battery "R03" × 2 (for the remote control)

Design and specifications are subject to change without notice.

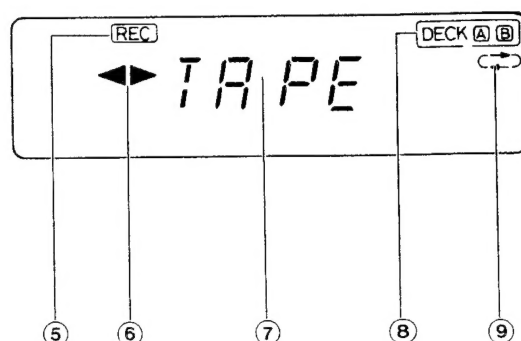
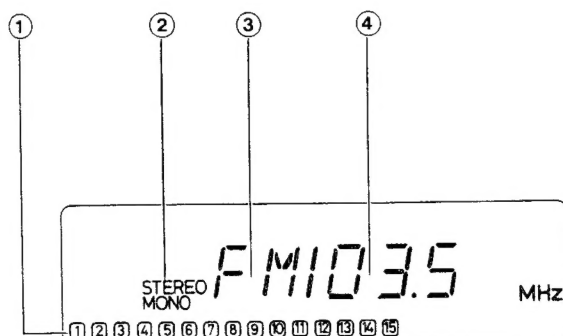
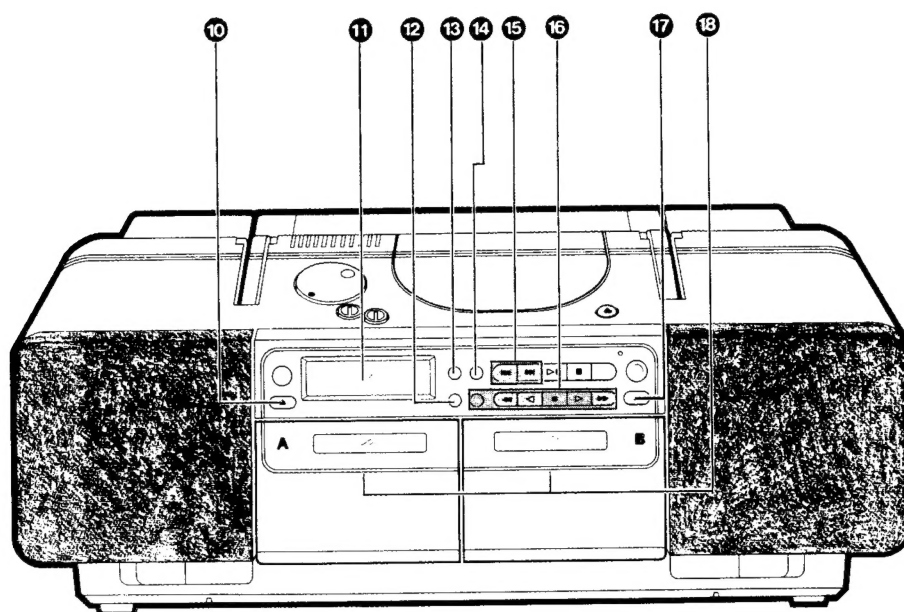
## 5 Instructions

### Names of parts and their functions



- ① Display window (CD player section)
  - ① TRACK (tune) number display
  - ② RANDOM playback indicator
  - ③ PROGRAM mode indicator
  - ④ Repeat playback indicator (↔ ALL)
  - ⑤ INTRO scan indicator
  - ⑥ EDIT recording mode indicator
  - ⑦ Playback time display
  - ⑧ Music calendar display
  - ⑨ REMAIN indicator
  - ⑩ OVER indicator
  - ⑪ SIDE **A** **B** indicator
- ② REMOTE SENSOR
- ③ VOLUME control and indicator

- ④ BASS•TREBLE controls
- ⑤ CD door
- ⑥ CD operation buttons
  - SEARCH buttons (◀◀, ▶▶):  
Press to locate the beginnings of tunes and to start forward and reverse search operations.
  - Play/Pause button (▶||):  
Press to play a disc and to stop temporarily.
  - Stop/Clear button (■):  
Press to stop playing a disc and to cancel programmed playback.  
This also sets the CD mode.
- ⑦ CD door OPEN button (▲)
- ⑧ POWER button and indicator
- ⑨ CD SYNCHRO REC button:  
Pressing this button starts the CD synchronized recording.



**10** Deck A eject button (▲):

**11** Display window

**Radio**

- ① Preset station display
- ② FM mode indicator (STEREO/MONO)
- ③ Band indicator
- ④ Radio frequency display

**Tape**

- ⑤ Recording indicator (REC)
- ⑥ Tape direction indicator (◀/▶)
- ⑦ Function display
- ⑧ DECK A/B indicator
- ⑨ Reverse mode indicator (↔ / ↔ / ↔)
- 12** Deck A/B select button  
If used simultaneously with the REC (B) ●/II button, the high-speed dubbing becomes possible.
- 13** REVERSE MODE button
- 14** TUNER/BAND/FM MODE button
  - Press to select the tuner mode.
  - Press to select the band (FM/AM).
  - Press to select the FM MODE.

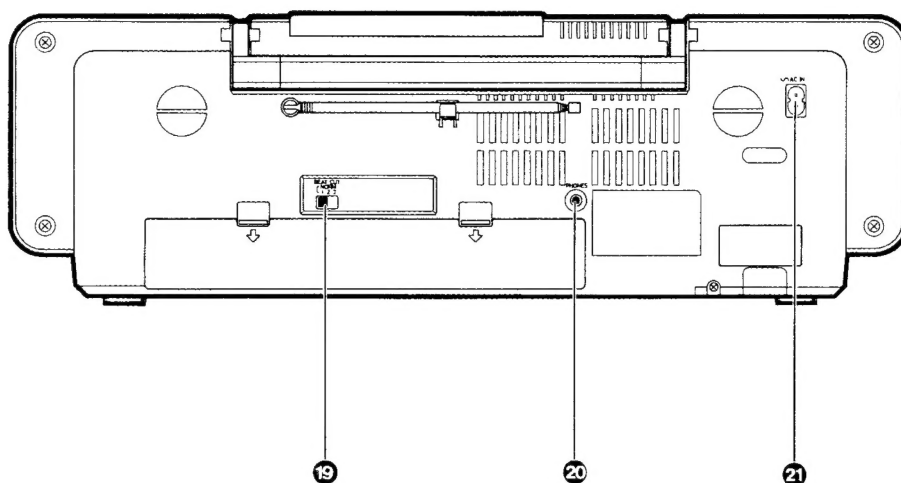
**15** TUNING buttons (UP/DOWN)

**16** Cassette operation buttons

- REC (B) ●/II : Press to set the unit to the record or record-pause mode.
- ◀ : Press to fast wind the tape from right to left.
  - ◁ : Press to play back the tape in the reverse direction.
  - : Press to stop the tape and to cancel the multi edit mode. This also sets the TAPE mode.
  - ▷ : Press to play back the tape in the forward direction.
  - ▶ : Press to fast wind the tape from left to right.

**17** Deck B eject button (▲):

**18** Cassette holders

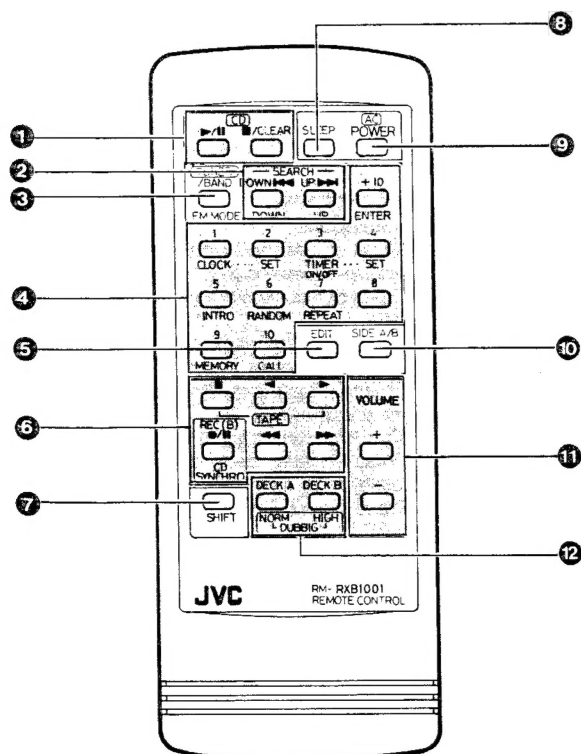


- 19 BEAT CUT switch (See page 39.)
- 20 PHONES Jack (3.5 mm dia. stereo mini plug)  
Connect headphones (impedance 16  $\Omega$  - 1 k $\Omega$ ) to this jack. The speakers are automatically switched off when headphones are connected.
- 21 AC input jack (AC IN)

## Remote control unit

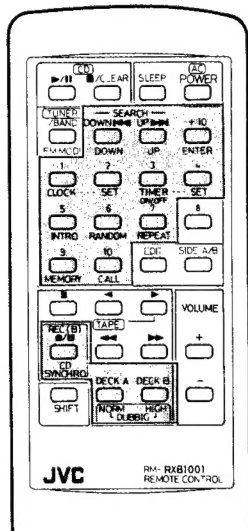
The following operations can be performed using the remote control unit.

- Check the functions of the operation buttons carefully and operate them correctly.



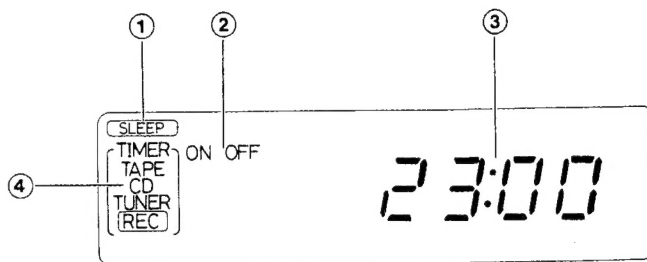
- 1 CD operation buttons
  - ▶/II: CD mode/play/pause button
  - /CLEAR: Stop/clear button
- 2 CD search/DOWN and UP button (◀◀, ▶▶)
  - To scan to the beginning of a tune and to start forward or reverse search when playing a CD.
  - Tuning when listening to radio broadcasts.
- 3 TUNER/BAND/FM MODE button
- 4 Track (tune) number buttons (No. 1 - No. 10, +10)  
Preset station buttons (No. 1 - No. 10, +10)
- 5 EDIT button
- 6 Cassette operation buttons
  - : Stop button
  - ▶ : Play button (reverse direction of tape)
  - ▶ : Play button (forward direction of tape)
  - REC(B) ●/II : Record/Record-pause button
  - ◀◀ : Fast wind (from right to left) button
  - ▶▶ : Fast wind (from left to right) button
- 7 SHIFT button  
With this button depressed, the functions indicated in blue letters on the remote control unit can be operated.
- 8 SLEEP button
- 9 POWER (AC) button
  - When power is supplied from batteries, even when this button is pressed, the RC-B1 will not be switched on.
- 10 SIDE A/B button
- 11 VOLUME buttons
- 12 DECK A/DECK B select button

- With the **SHIFT** button depressed, the functions indicated in blue letters on the remote control unit can be operated.



- DOWN/UP : To set the hour for the clock or the timer, the timer mode or the sound volume when operation is started according to the timer;
- UP/ENTER : To set the current hour or to set the timer;
- 1 CLOCK : To display the hour in the display window;
- 2 SET : To select the time adjustment mode;
- 3 TIMER ON/OFF : To turn on or off the timer function;
- 4 SET : To select the timer set mode;
- 5 INTRO : To use the "Intro Scan" function;
- 6 RANDOM : To use the "Random Playback" function;
- 7 REPEAT : To use the "Repeat Play" function;
- 9 MEMORY : To use the "Programmed Play" function;
- 10 CALL : To confirm the sequence of the programmed tunes;
- REC (B) / CD SYNCHRO : To carry out edit recording, multi-edit recording or synchronized recording of a CD;
- DECK A / NORM : To dub;
- **NORM**: normal-speed dubbing;
  - **HIGH**: high-speed dubbing.

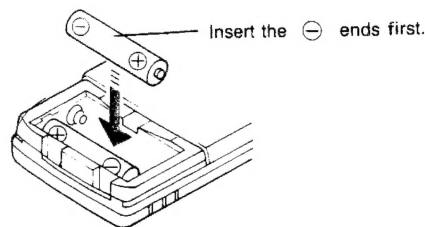
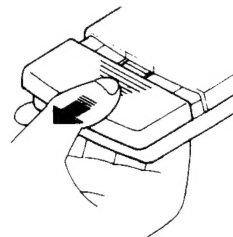
Timer



- ① SLEEP indicator
- ② Timer ON/OFF indicator
- ③ Time display
- ④ TIMER mode indicator

### Preparation before use

- **Installing batteries in the remote control unit**
  1. Remove the battery cover from the back of the remote control unit.
  2. Insert two "R03" size batteries.
- Insert the batteries with the  $\oplus$  and  $\ominus$  terminals matching the indication inside the battery compartment.



3. Replace the cover.

- **Battery replacement**

When the remote control operation becomes unstable or the distance from which remote control is possible becomes shorter, replace the batteries with new ones.

### Using the remote control unit

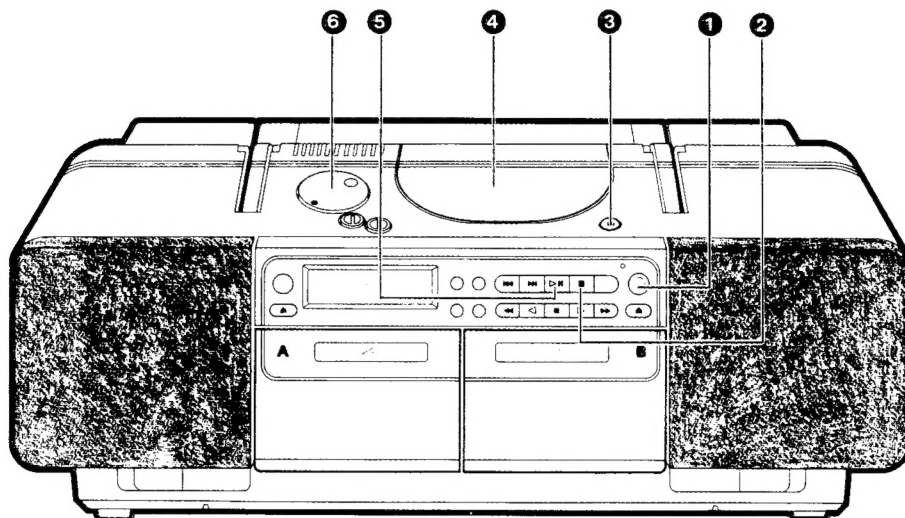
To use the remote control unit, point it at the REMOTE SENSOR and press the buttons gently and firmly. Remote control operation is possible within about 7 m (approx. 23 ft). However, since the remote control range is less when the unit is used at an angle, use directly in front of the REMOTE SENSOR, as far as possible.

Do not expose the REMOTE SENSOR to strong light (direct sunlight or artificial lighting) and make sure that there are no obstacles between the REMOTE SENSOR and the remote control unit.

## Playing compact discs

**Playing an entire disc ...** The following example assumes a compact disc with 12 tunes and a total playing time of 48 minutes 57 seconds.

Operate in the order shown



- 1 Set to on.
- 2 Set to the CD mode.
  - When a CD is first loaded, the total number of tracks (tunes) and total playing time are displayed.
- 3 Press to open the CD door.
- 4 Load a disc with the label side facing up. Close the CD door.
- 5 Press to start play.
  - As tunes are played, their track numbers go out one by one.
- 6 Adjust the volume.

### To stop play

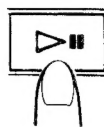
- **To stop in the middle of a disc**  
During playback, press the Stop/Clear button to stop play.



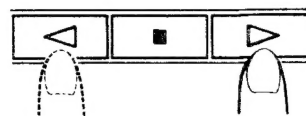
- The total number of tracks (tunes) and total playing time are displayed.
- **To stop a disc temporarily**  
Press the ▷|| button to stop play temporarily. When pressed again, play resumes from the point where it was paused.

### Automatic source selection

- Simply press the play button corresponding to the required source to listen to a CD or tape.



CD play



Tape playback

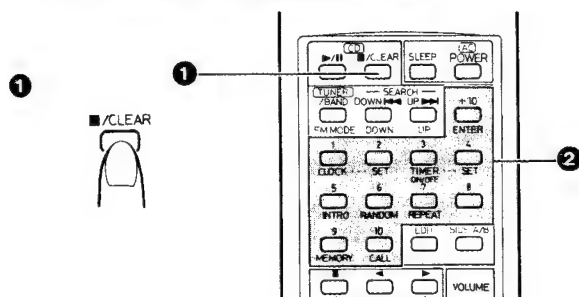
Automatic source selection allows you to automatically select the source corresponding to the button pressed. (The remote control unit also has this automatic source selection function.)

#### Cautions:

- To change discs, press the Stop/Clear button; check that the disc has stopped rotating completely before unloading it.

### Direct access playback (using the remote control)

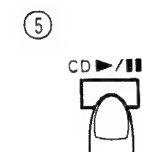
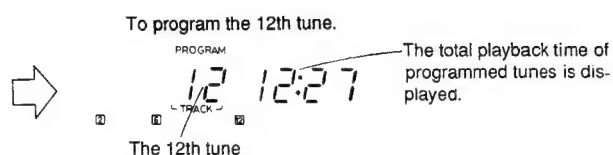
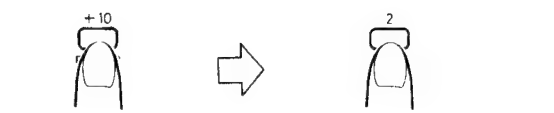
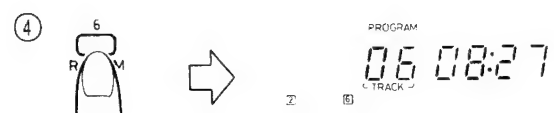
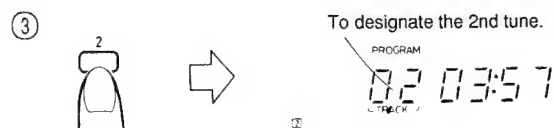
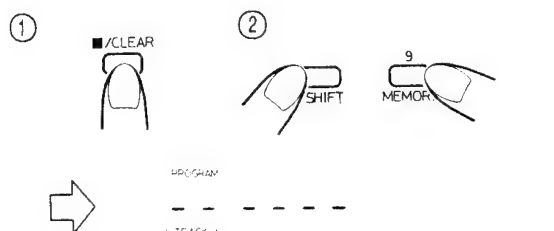
- Pressing any of the track number buttons will start play from the beginning of the designated tune, without your having to press the CD ►/|| button. (This function cannot be used during programmed play.)



- Press the ■/CLEAR button to set to the CD mode.
- Designate the required tune using the track number buttons.
  - To designate tune numbers 1 to 10, press the track number button corresponding to the tune (track) number.
  - To designate tune number 11 or higher, press the +10 button the required number of times, then a track number button. (Example: To designate the 25th tune, press the +10 button twice, then press track number button 5.)
- To skip to another tune during play**  
When the required track number button is pressed, the display shows the designated track number and play starts from the beginning of the designated tune.

### Programmed play (using the remote control)

- Up to 20 tunes can be programmed to be played in any required order.  
The total playing time of programmed tunes is displayed (up to 99 minutes, 59 seconds).  
(Example: When programming the 2nd tune to be played first, and the 6th tune next, then the 12th tune, etc.)



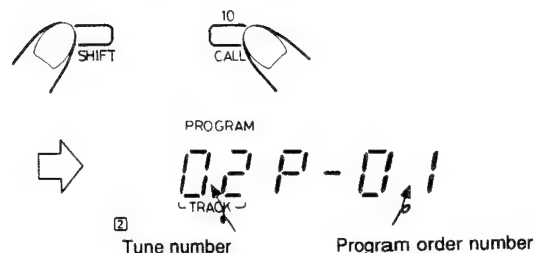
- Press the ■/CLEAR button.
- Press the MEMORY button while simultaneously pressing the SHIFT button to select the programming mode.
- Press to designate the required track number.
- Designate the remaining tunes by pressing the track number buttons.
- Press the CD ►/|| button when programming is completed. Programmed playback starts.

#### To clear the programmed tunes ...

Press the ■/CLEAR button before playing a disc. During programmed playback, press this button twice. When the CD door is opened, programmed tunes are cleared automatically.

#### To confirm the details of a program...

If the CALL button is pressed with the SHIFT button depressed, track numbers for the programmed tunes are displayed in sequence as programmed.





#### Notes:

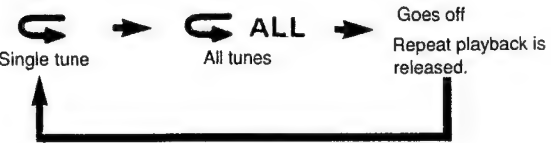
- If the total playing time of the programmed tunes exceeds 99 minutes 59 seconds, the total playing time indication will go out.
- Programming 21 or more tunes is impossible.
- When a disc with 16 or more tunes is loaded, the "OVER" indicator will appear.
- When performing timer playback in the order of "Programmed play", step ⑤ above is not required.




**Repeat play (using the remote control)**


Press the REPEAT button while simultaneously pressing the SHIFT button before or during play. A single tune or all the tunes can be repeated.

Whether a single tune or all tunes are to be repeated can be specified. Each time the REPEAT button is pressed, the mode will change from a single tune (  ), to all the tunes (  ALL ), to the clear mode, in this order.



- **Repeat playback of a single tune (  )**  
The tune being played back will be heard repeatedly.




- **Repeat playback of all tunes (  ALL )**  
When playing back an entire disc or programmed tunes, all tunes or the programmed tunes will be heard repeatedly.

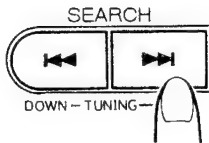


**Skip playback**


- During playback, it is possible to skip forward to the beginning of the next tune or back to the beginning of the tune being played back or the previous tune; when the beginning of the required tune has been located, play starts automatically.

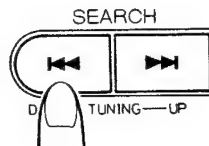
**To listen to the next tune ...**

Press the  button once to skip to the beginning of the next tune.



**To listen to the previous tune ...**

Press the  button to skip to the beginning of the tune being played back and press again to skip to the beginning of the previous tune.



**Random playback (using the remote control)**

If the RANDOM button is pressed with the SHIFT button depressed simultaneously, all the tunes on the disc are played once each in random order.



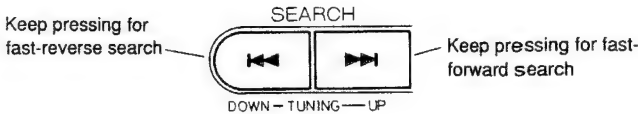
**INTRO scan operation (using the remote control)**

- Press the INTRO button while simultaneously pressing the SHIFT button to play the first 15 seconds of each tune. The operation is released after playing the introductions of all tunes or all programmed tunes.
- If the INTRO button is pressed with the SHIFT button depressed in the middle of a tune, the "intro scan" operation starts from the next tune.
- In order to cancel the intro scan mode, press the INTRO button again while simultaneously pressing the SHIFT button.



**Search playback (to locate the required position on the disc)**

- The required position can be located using fast-forward or reverse search while playing a disc.

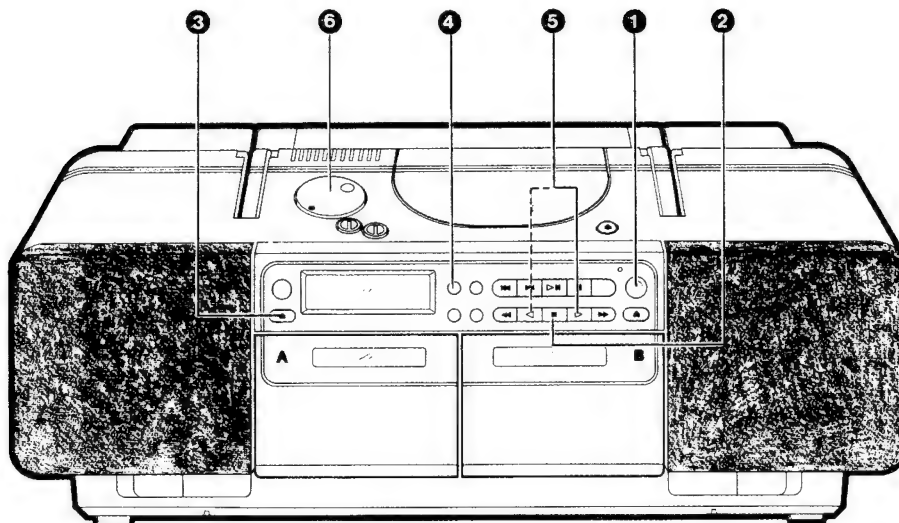


- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

## Cassette playback

- Playback of deck A

Operate in the order shown



- ① Set to on.
- ② Set to the TAPE mode.
- ③ Load a cassette with side A facing out.
  - "DECK **A**" is displayed.
- ④ Select the reverse mode ( / / ).
- ⑤ Press to start playback.
  - With automatic source selection, playback can be started from the deck.
- ⑥ Adjust the volume.
  - When the tape is played back with the reverse mode set to the (single side play) or (both side play) mode, the tape stops automatically at the end of tape after playing one side or both sides.

- **Playback of deck B**

After inserting a cassette tape into deck B ("DECK **B**" is displayed), press the or button.

- **Cassette tape operation buttons**

The cassette tape operation buttons on this unit can be used for both decks A and B. When a cassette tape is inserted into one of the decks, that deck becomes operable.

- If cassette tapes are inserted into both decks A and B, the deck loaded later becomes operable.

- **DECK A/B select button**

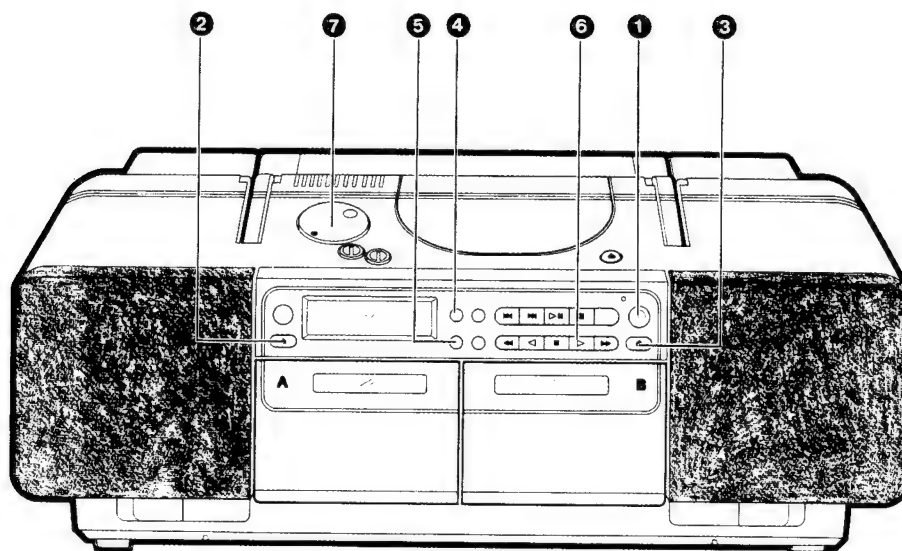
The DECK A/B select button is used to select which deck to operate when both decks A and B are loaded with a cassette tape. The deck in operation changes every time the button is pressed. The display window displays "DECK **A**" or "DECK **B**" to indicate which deck has been selected.






- Press the (stop) button in order to stop the tape.
- In order to fast forward the tape, press the or button.

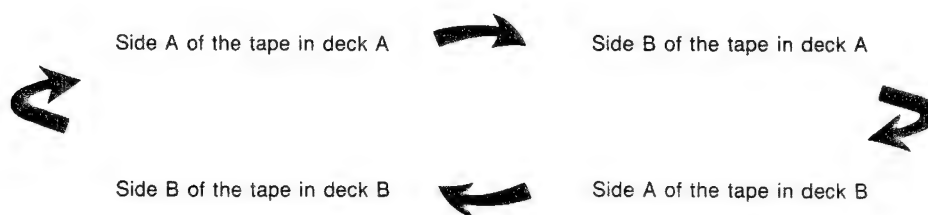
To play continuously from deck A to deck B:

Operate in the order shown.



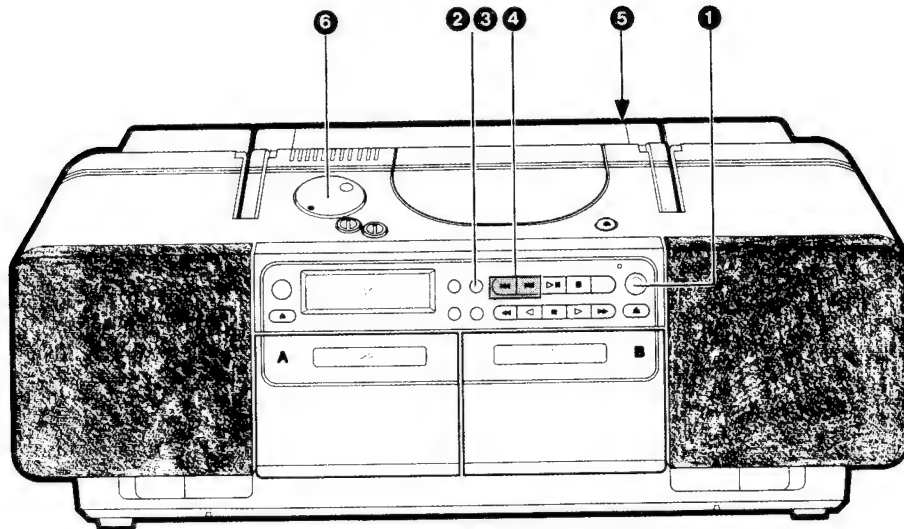
- ① Set to ON.
- ② Load a cassette with side A facing out. (Deck A)
- ③ Load a cassette with side A facing out. (Deck B)
- ④ Set the reverse mode to .
- ⑤ Select the deck to be played first.
- ⑥ Press to start continuous play.
- ⑦ Adjust the volume.

- To stop the continuous play, press the  button. If the reverse mode is set at , the tape stops running when it reaches the end of one side.
- When one deck finishes playback in the reverse direction (side B of the tape), the other deck automatically starts playback in the forward direction (side A of the tape). At this point, the deck which has finished playback stands by until the other deck completes playback even if its playback direction is changed.



## Radio reception

Operate in the order shown.



- 1 Set on.
- 2 Press the TUNER/BAND button; a band and radio frequency will be shown in the display.
- 3 Select the band (FM or AM (MW/LW)).
- 4 Tune to the required station.
- 5 Adjust the antennas.
- 6 Adjust the volume.

### FM MODE button

#### STEREO:

Set to this position when listening to or recording an FM stereo broadcast.

#### MONO:

Set to this position when FM stereo reception is noisy.

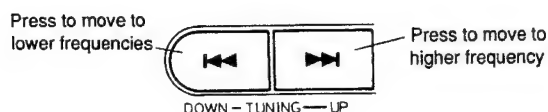
#### • Seek tuning

Press the UP or DOWN tuning button for one second or more; the unit enters the seek tuning mode and tunes to higher or lower frequencies, and when the broadcast is received, it stops tuning automatically and the broadcast can be heard.

In AM operation, the frequency moves continuously from the MW to the LW band and vice versa.

#### • Manual tuning

Each time the UP or DOWN button is pressed, the unit steps through the current frequency band. Tuning is in steps of 50 kHz for FM and 9 kHz for AM (MW/LW). In AM operation, the frequency moves continuously from the MW (522 - 1.629 kHz) to the LW band (144 - 288 kHz) and vice versa.



#### Notes:

- When seek tuning to the required station is not possible because it is broadcasting too weak a signal, press the UP or DOWN button momentarily to perform manual tuning.
- When the power is set to standby mode, or another mode (TAPE or CD) is selected, the last tuned frequency is stored in memory. When the power is switched on again or BAND/FM MODE button is pressed, the same station will be heard.

### Using the antennas

**FM:** Adjust the length and angle of the telescopic antenna so as to obtain the best reception.

**AM (MW/LW):** Turn the unit to an angle that gives the best reception.

#### Note:

The built-in ferrite core antenna can pick up interference tones from television receivers in the neighbourhood and thereby disturb AM (MW/LW) reception.

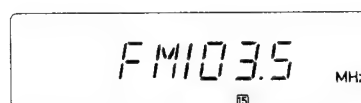
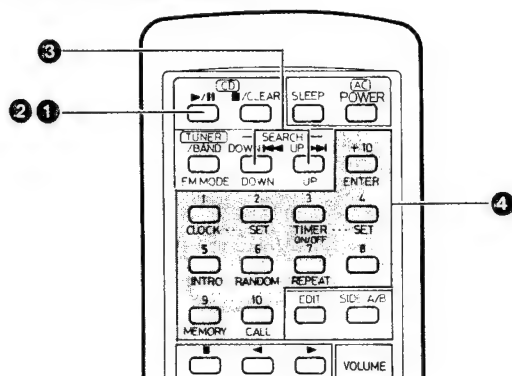
## BEAT CUT switch

When beats are produced while listening to a broadcast or recording, activate the BEAT CUT switch so that the beats are eliminated or minimized.

## Presetting stations (using the remote control unit)

15 stations in each band (FM and AM (MW/LW)) can be preset as follows:

- Example (when presetting an FM station broadcasting on 103.5 MHz to preset button "15")



- 1 Press the TUNER/BAND button.
- 2 Select the FM band using the TUNER/BAND button.
- 3 Tune to the required station.
- 4 Press preset button "+10", then "5" for more than 2 sec. (When "15" blinks in the preset station display, the station has been preset.)

- Repeat the above procedure for each of the other stations, using a different preset button each time..
- Repeat the above procedure for the AM (MW/LW) band.

### To change preset stations

Perform step 4 above after tuning to the required station.

### Notes:

- The previous preset station is erased when a new station is preset as the new station's frequency replaces the previous frequency in memory.
- When listening to an AM (MW/LW) broadcast, noise may be heard if the remote control is used.
- When batteries are mounted for the memory backup/timer, the presettings specifying radio stations will not be deleted even during a power failure.

## Preset tuning (using the remote control unit)

- The stations must be preset before this operation can be performed.
- 1 Press the TUNER/BAND button
  - 2 Select the band (FM or AM (MW/LW)) using the TUNER/BAND button.
  - 3 Press the required preset station buttons (No.1 – No.10, +10).
- The preset station number and frequency corresponding to the button pressed are shown.

## Recording (deck B)

- In recording, the ALC circuit automatically optimizes the recording level; adjustment of the recording level is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

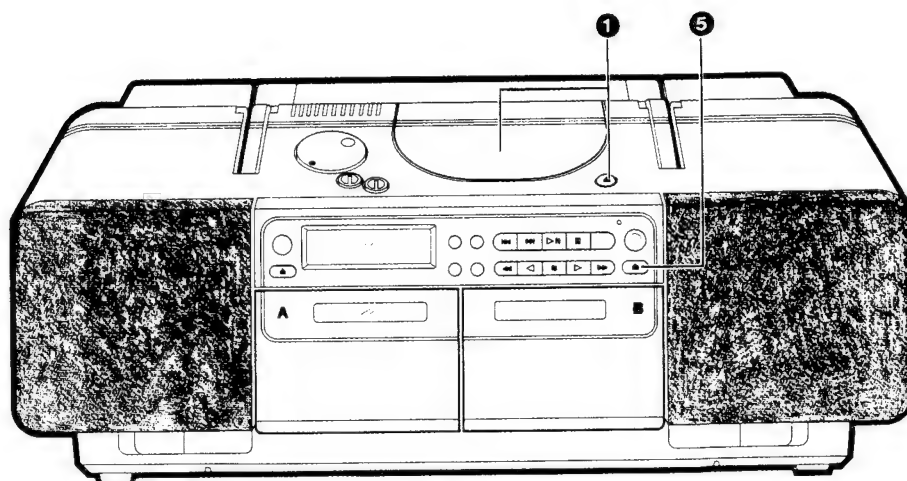
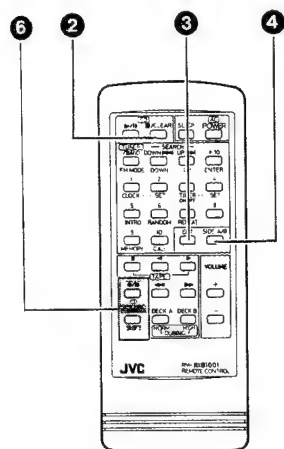
### Note:

This unit has recording characteristics suitable for normal and CrO<sub>2</sub> tapes. Normal and CrO<sub>2</sub> tapes have different characteristics from metal tape.

## CD edit recording (for CDs with up to 20 tunes)

- By checking the total playing time of the CD, a microcomputer in the unit automatically calculates the optimum length (recording time) of the tape to be used, displays the required tape length, and divides the tunes on the disc into two groups to be recorded on the two sides of the tape so as to minimize tape waste.

Operate in the order shown



- 1 Load a disc.
- 2 Set to the CD mode.
- 3 Press the EDIT button once.



The tune numbers to be recorded on side A appear.

1 2 3 4 5 6

A . EDIT  
C-54  
SIDE A

- 4 Press the SIDE A/B button.



The turn numbers to be recorded on side B appear.

7 8 9 10 11 12

A . EDIT  
C-54  
SIDE B

- 5 Insert a cassette with a suitable length (recording time) with side A facing out.
  - The tape length can be set from the remote control. (See below.)
- 6 Press the CD SYNCHRO button while simultaneously pressing the SHIFT button to start CD edit recording.
  - Recording starts in the forward direction (on the side facing out).
  - During edit recording, the leader tape section (approx first 10 sec.) is wound automatically and then recording starts. The reverse mode is set to ⤴ mode automatically.

- The tape stops automatically when the CD has been played.

#### • To change the tape length (recording time)

When the EDIT button is pressed with a CD loaded, the tape length required to record the entire disc is displayed (C-46, C-54, C-60, C-74 or C-90). At this time, the displayed tape length can be changed by pressing the track number buttons.

#### Example: To change to C-50

Press the +10 button four times, and within 10 seconds, press the 10 button.

When the length of the tape is changed, some of the tunes that were to be recorded on side A may be indicated as to be recorded on side B or vice versa, according to the tape length specified.

Depending on the tape length specified, some tunes may not be recorded on the tape. Set the tape length (recording time) so that the entire disc can be recorded.

- **When editing a disc with 16 to 20 tunes**

CD editing can be used to record discs containing up to 20 tunes, however, the music calendar shows up to only 15 tunes.

As the 16th to 20th tunes will not appear in the music calendar display (the "OVER" indicator will light), be sure to check the tunes you have recorded after completing editing.

**Notes:**

- When a disc with 21 tunes or more is loaded, "C---" will appear in the display. In such a case, set the required tape length using the track number buttons on the remote control.
- In CD edit recording blanks of approx. 4 seconds will automatically be left between tunes on the recorded tape.

**When automatic spacing between tunes is not required ...**

Perform the following.

1. Press the ▷/|| button of the CD player twice. The CD Player enters the pause mode.
2. Press the CD SYNCHRO REC button to start recording.

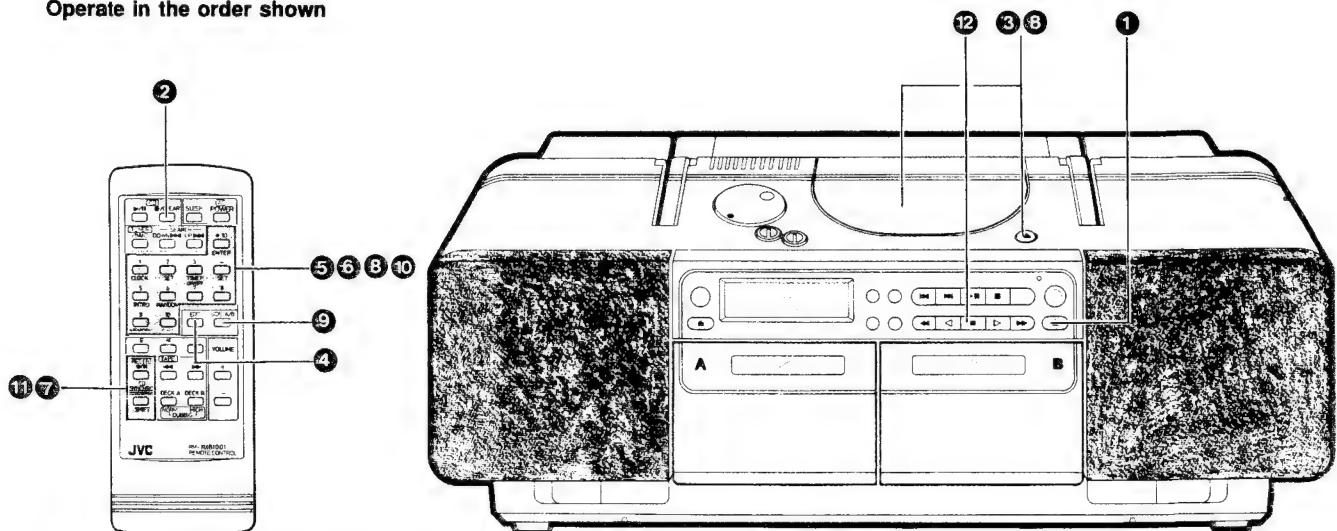
**Note:**

- Depending on the disc used, blanks of a specified length may be left between tunes.
- **After use**  
Press the ■/CLEAR button to release the CD edit recording mode. (The CD edit recording mode is also released when the CD door is open.)

**CD multi edit recording (to record only the required tunes from more than one disc)**

- Example: 7-tune edit recording from two CDs containing 12 tunes and 9 tunes respectively, onto a C-46 tape.

Operate in the order shown



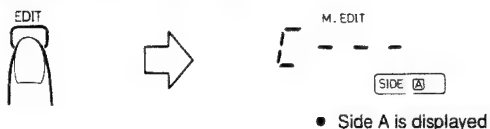
1. Load a blank cassette with side A facing out.

- The example shows C-46.

2. Set to the CD mode.

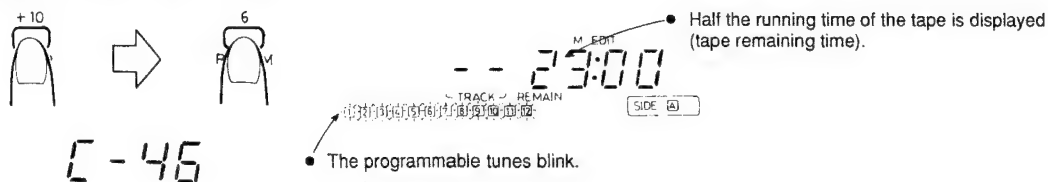
3. Load a disc.

4. Press the EDIT button twice.



5. Input the tape length (C-46).

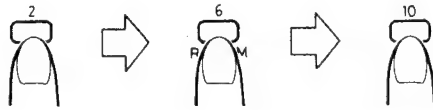
- To set to C-46, press the +10 button four times and press the 6 button within 10 sec.





**6** Input the tunes to be recorded with the tune number buttons.


- Example: Programming tune numbers 2, 6, 10, in this order, to be recorded from the first disc.



- Tape remaining time 8 minute 02 sec.



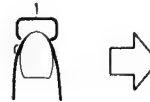
**7** Press the CD SYNCHRO button while simultaneously pressing the SHIFT button to start CD multi-edit recording.

- First, the deck winds past the leader tape and then recording starts.
- The reverse mode is automatically set to .



**8** When the edit recording of first disc is completed, replace the disc and program the tunes to be recorded from the second disc.

- Example: Programming tune numbers 1, 3, 4, 7, in this order, to be recorded from the second disc.



- When tune number 1 is input, the indicator shows that only tune number 8 can be recorded within the tape remaining time so that other tunes cannot be programmed to be recorded.




**9** Press the SIDE A/B button.



- The tunes that can be programmed to be recorded on side B blink.
- SIDE B is displayed.

**10** Program the rest of tunes.

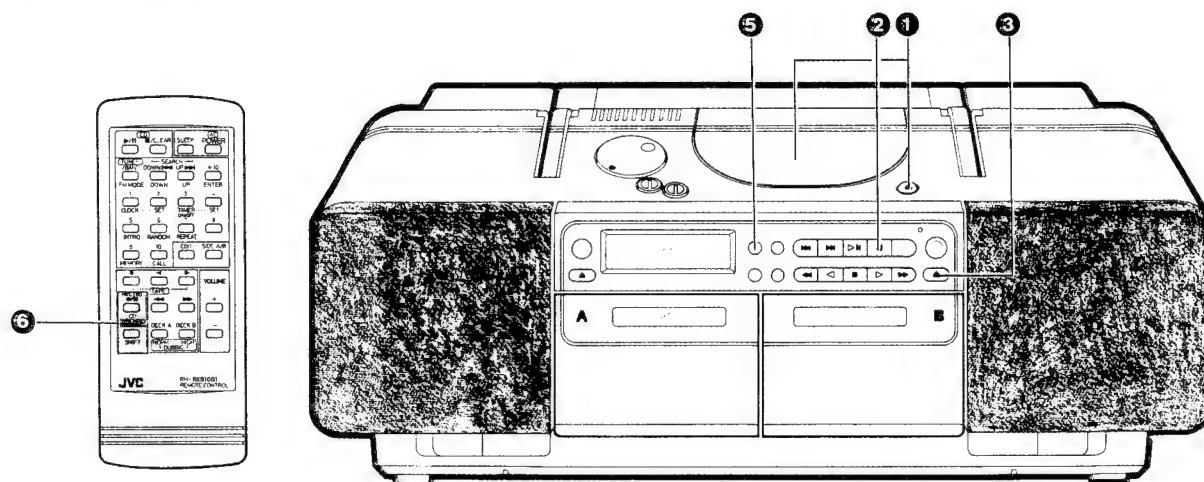
- 11** Press the CD SYNCHRO button while simultaneously pressing the SHIFT button to start recording.  
In CD multi edit recording blanks of approx. 4 seconds will automatically be left between tunes on the recorded tape.

- **To change the tape length or programmed tunes....**  
Press the /CLEAR button once to release the multi edit recording mode, then press the EDIT button twice.
- When there is insufficient remaining time on the tape, the tunes that cannot be recorded disappear from the music calender.

## Synchronized recording with the CD player

- In this system, the CD player starts playback when the cassette deck enters the recording mode.

Operate in the order shown



- ① Load a disc and close the CD door.
  - ② Set to the CD mode.
  - ③ Load a cassette with side A facing out. (Wind past the leader tape before starting recording.)
  - ④ When programmed playback is required, program the required tunes using the remote control. (See page 26.)
    - Select tunes with a total playing time which does not exceed the tape length.
  - ⑤ Select the required reverse mode ( or )
  - ⑥ Press the CD SYNCHRO button while simultaneously pressing the SHIFT button to start synchronized recording.
- Recording starts in the forward direction and CD play starts automatically.
  - When the CD player has played the disc or programmed tunes, the deck stops automatically.
  - Non-recorded sections of approx. 4 seconds are automatically left between tunes.
  - To stop recording in the middle, press the (stop) button of the cassette deck.

### • CD complete recording function (Synchro recording mode only)

If the tape is reversed while a CD is being played, recording will be done on the reverse side of the tape as follows:

- When less than 8 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the previous tune.
- When more than 8 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the current tune.

### • To record an entire disc in the tune order of the CD

After performing the operations in step ① to ③ above, press the REC (B) and buttons of the cassette operation buttons simultaneously. Then, press the button of the CD operation buttons.



- In order to start synchronized recording using buttons on the main unit, press CD SYNCHRO REC button instead of the operation in step ⑥.

### Note:

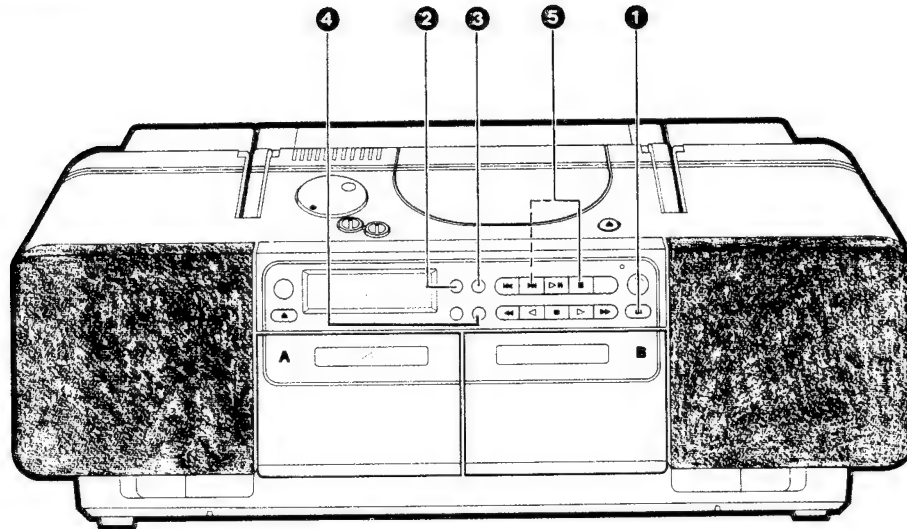
- During CD edit recording and synchro recording, the PAUSE and SEARCH buttons do not function.
- In order to record tunes without blank spaces between them:
 

After performing the operations in step ① to ⑤ for synchronized recording, operate as follows:

  - ⑥ Press the button of the CD operation buttons twice.  
CD player pauses.
  - ⑦ Press the CD SYNCHRO button while simultaneously pressing the SHIFT button.  
Recording starts without leaving blank space between tunes.

## Recording from the radio

Operate in the order shown



- ① Load a cassette with side A facing out.  
(Wind past the leader tape before starting recording.)
- ② Select the required reverse mode (  $\Rightarrow$  or  $\Leftarrow$  ).
- ③ Select the required station to be recorded.
- ④ Press the  $\bullet$ /|| REC button (recording-pause mode).
  - The tape direction indicator showing the side to be recorded blinks.
  - The function switch is locked and its position cannot be changed.

- ⑤ Press to start recording.

- To stop recording temporarily, press the  $\bullet$ /|| REC button. To resume recording, press the  $\triangleright$  or  $\triangleleft$  button corresponding to the tape direction indicator which is blinking.

### Note:

- Recording cannot be performed on the side the tape direction indicator of which is not lit.

## Erasing

When recording on a pre-recorded tape, the previous recording is automatically erased and only the new material can be heard when the tape is played.

To erase a tape without making a new recording...

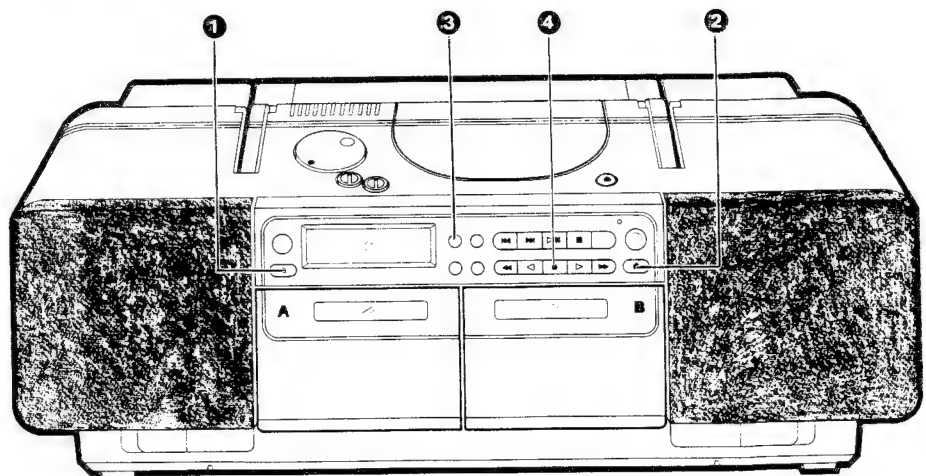
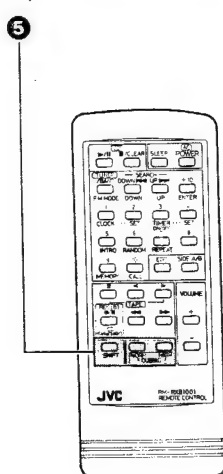
Press the  $\blacksquare$  (stop) button to set to the TAPE mode, then perform recording.

## Dubbing

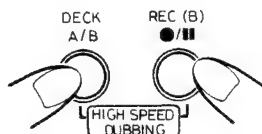
Normal and high-speed dubbing can be done from deck A to deck B.

Operate in order shown.

- ① Load a pre-recorded cassette.
- ② Load a cassette for recording.
- ③ Select the reverse mode (  $\Rightarrow$  /  $\Leftarrow$  ).
- ④ Set to the TAPE mode.
- ⑤ Press the DUBBING buttons (NORM or HIGH) while simultaneously pressing the SHIFT button.  
Dubbing begins. (The tape on the forward side is dubbed first.)



- The tape direction indicator indicates the running direction of deck B during the dubbing operation.
- After the completion of playback on deck A, deck B also stops simultaneously.
- In order to stop dubbing halfway, press the ■ (stop) button. The tapes in both the A and B decks stop running, thereby interrupting dubbing operation.
- In order to start high-speed dubbing using the buttons on the main unit, after performing the operations in steps ① to ④ above, press the REC (B) ●/II button and the DECK A/B select button simultaneously after performing the operations in steps ① to ④ above.



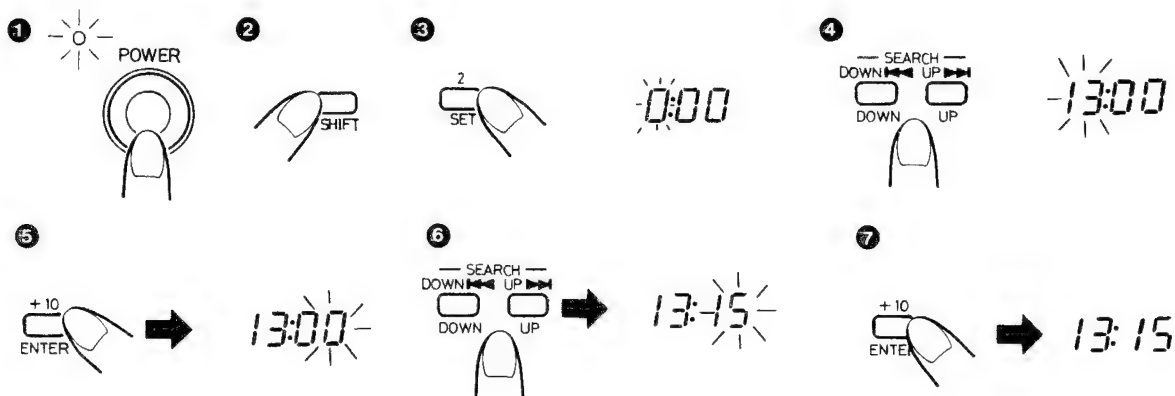
- In order to start normal-speed dubbing using the buttons on the main unit, after performing the operations in steps ① to ④ above, press the REC (B) ●/II button first and then the DECK A/B select button. Next, press the ▷ button.

The type of tape (Normal or CrO<sub>2</sub>) used for recording must be the same as that used for playback.

## Clock adjustment

Setting the current time  
(when the RC-B1 is used for the first time)

(Example: to set the clock to 13:15.)



- ① Set to on.
  - ② Press the SHIFT button.
    - Keep the SHIFT button depressed until the current time is set.
  - ③ Press the clock SET button; the hour's digits will blink.
  - ④ Set the "hour" using the DOWN and UP buttons.
  - ⑤ After setting the "hour" correctly, press the ENTER button to enter it.
    - The minute's digits will blink.
  - ⑥ Set the "minutes" using the DOWN and UP buttons.
  - ⑦ After setting the "minutes" correctly, press the ENTER button to enter it.
    - The time will light continuously in the display window.
- To set to the nearest second...  
Press the ENTER button when you hear the time signal from a TV or radio.

### Notes:

- Before performing timer recording or playback, it is necessary to set the current time.

### Notes:

1. Television receivers placed close to this unit may cause interference on the recorded signal when this unit is used in the high-speed dubbing mode. If this happens, either turn off the television receiver or use the normal-speed dubbing mode.
2. It is recommended that the normal-speed dubbing function be used when possible as it ensures a higher quality of sound.

- If no batteries are mounted for the memory backup/timer, the settings that have already been entered will be deleted in case of power failure. In such circumstances, the "0:00" display flashes on the clock display window. Set and re-enter the current time.



With batteries mounted for the memory backup/timer, the current time will be maintained even when the power is cut off.

- If the CLOCK button is pressed with the SHIFT button depressed when a CD or cassette tape is being played or radio waves are being received, the current time is displayed for ten seconds. After ten seconds, this is replaced with the original display.

## Timer operations

### Timer recording (deck B)

- The current time must be set correctly before you set timer recording.
- Make sure that the erase protection tabs of the cassette have not been broken off.

#### Operations

1. Set the POWER button to ON.
2. Load a cassette.
  - Insert the cassette with the side to be recorded facing out.
  - Set the reverse mode button to "↔" or "↔".
3. Set the timer start and stop times, set the timer recording mode, then set the required volume, in this order. (Refer to "Setting the timer" on page 58.)
  - Set the timer about a minute before the broadcast to be recorded is scheduled to start.
  - Set the TIMER mode to **TIMER/TUNER REC**.
4. Tune to the station to be recorded. (Refer to page 37.) Press the BAND/FM MODE button and select a radio mode (MONO or STEREO).
5. Set the POWER button to standby mode.

- **Timer recording will start at preset start time and the power will be switched off at preset stop time.** When timer recording is completed, the timer mode is switched to the "TUNER" (timer reception of broadcast) mode.

#### To cancel timer operation

Press the TIMER ON/OFF button while simultaneously pressing the SHIFT button to delete the timer mode display.

If you do this, timer recording will not start at the timer start time.

#### Notes:

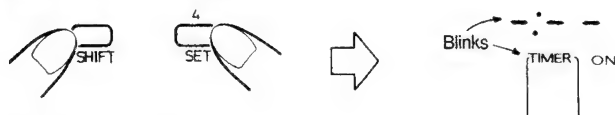
Once the timer has been set, the start and stop times, etc., are stored in memory. When timer recording or playback is required at different times, the timer must be set again.

- Confirm that the radio is tuned to the desired station before entering the hours to start and finish operation according to the timer.
- With batteries mounted for the memory backup/timer, the timer settings will be maintained even when the power is cut off.

### Setting the timer

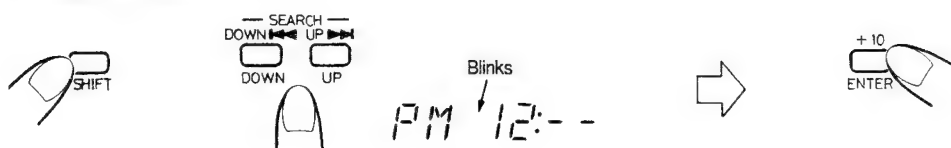
- The current time must be set before the timer can be used.  
Operate as follows while pressing the SHIFT button. Keep the SHIFT button depressed until all the operations in steps ① to ⑤ have been completed.

- ① Press the TIMER SET button.



- ② Set the start time  
(Example: when the timer start time is set to 12:15.)

- ① Adjust the hours.



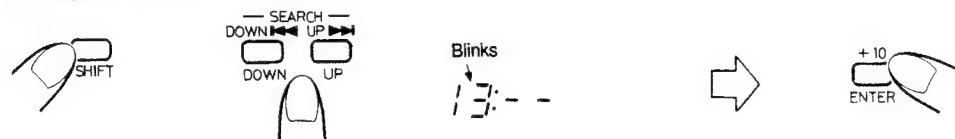
- ② Adjust the minutes.



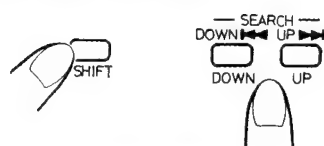
- Press to set the start time.

- ③ Set the stop time  
(Example: when the timer stop time is set to 13:15.)

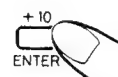
- ① Adjust the hours.



## ② Adjust the minutes.

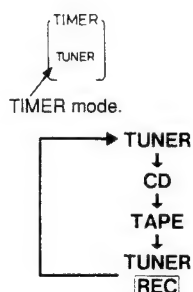
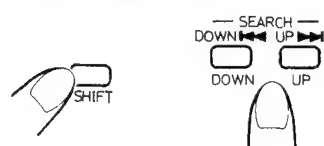


Blinks  
13:15



- Press to set the timer off time.

## ④ Select the TIMER mode.

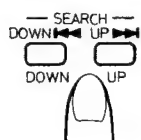


- The selected timer mode is shown in the display.

When the UP button is pressed to select the timer mode, the mode changes from the TUNER (timer reception of a broadcast), CD (timer playback of a CD), TAPE (timer playback of a tape), to TUNER/REC (timer recording of a broadcast), in this order.

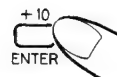
Blinks  
Vol

## ⑤ Set the volume.



Vol 1

This shows when volume level 1 is selected.



- The selected volume is set.

The playback level is determined by the position of VOLUME control.

Vol - → Vol 1 → Vol 2 → Vol 3 → Vol 4 → Vol 5

The volume decreases to zero at the timer start time, and the sound fades in. (Volume level 5 is approximately the same as when the VOLUME control is set to its center position.)

- The unit enter the previously engaged mode and timer setting is complete.
- **To check the timer setting**  
With the power on, operate as follows:
  1. Press the SHIFT and TIMER SET buttons simultaneously;
  2. Press the ENTER button;
    - Timer settings are displayed one after another on the display window every time the ENTER button is pressed.
  3. When the previous engaged mode is displayed, timer setting has been completed.

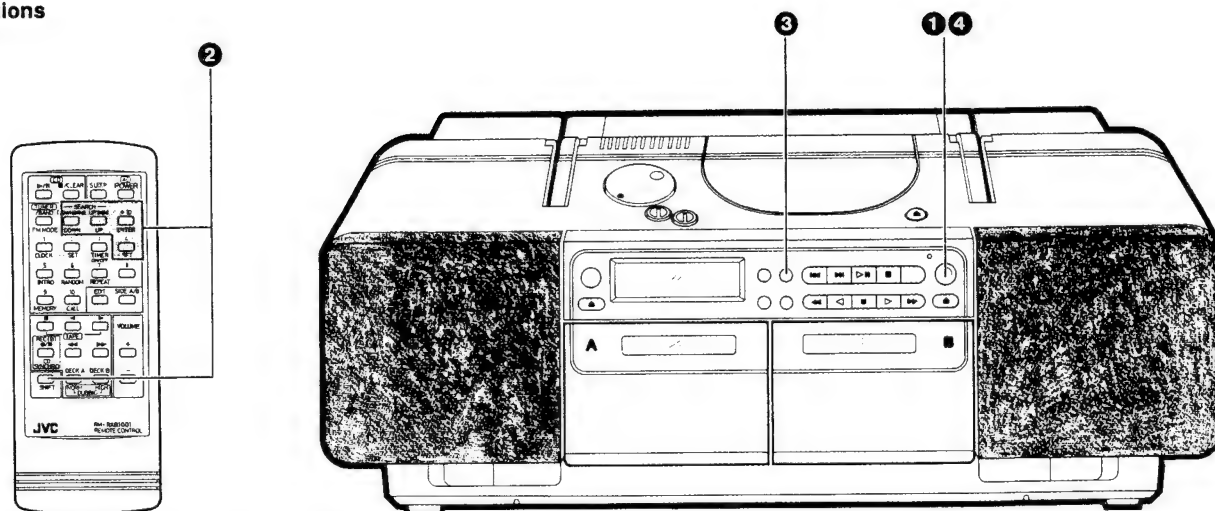
**Notes:**

- When the timer is set incorrectly or the correct mode is not selected, perform "Setting the timer" from the beginning.
- When the timer is set, "-:--" in the display is replaced by the input digits.
- When the timer stop time is not set, the timer operates for 2 hours and then the unit is switched off. To continue listening after the timer stop time, display the timer stop time, change the hours digits to "-:" using the UP button and press the ENTER button.

## Timer playback

- Timer playback of tapes, broadcasts and CDs is possible.

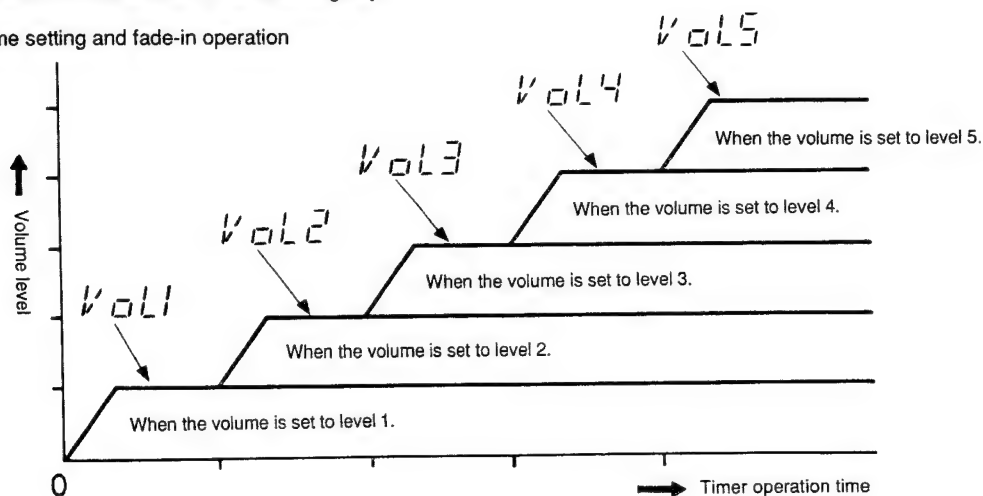
## Operations



- 1 Set the POWER switch to ON.
- 2 Set the timer start and stop times, set the timer playback mode, then set the volume, in this order.  
(Refer to "Setting the timer" on page 58.)

Source sound	Timer mode	Operations
CD play	CD	Load a disc.
Tape playback	TAPE	Load a cassette tape.
Broadcast	TUNER	—

- Timer playback of a CD is possible in programmed order. (See page 26.)
  - The volume can be set to 5 different levels.
- 3 Tune to the required frequency when the timer playback of a broadcast is to be performed.
  - 4 Switch the power off.
- Timer playback will start at the timer start time and the power will be switched off at the timer stop time. The unit remains in the same timer mode even after the power is switched off and the same timer function will be repeated at the same time on the following day.
  - Volume setting and fade-in operation
  - When the power is switched on, it is possible to fade in the sound from volume level 0 (zero) to the preset volume.





- **To cancel timer operation**  
Press the SHIFT and TIMER ON/OFF buttons simultaneously to delete the timer mode display. (To set to the timer mode again, press the TIMER ON/OFF button so that the timer mode display appears.)

**Notes:**

- When the volume setting is set to "VoL -" (volume level is not specified), the timer playback volume is set to that before setting the timer.
- To stop during timer playback, press the POWER button to switch the unit off.
- In the fade-in mode, the volume gradually increases from zero.

**Sleep Operation**

**A. Use this when you want to fall asleep while listening to CD, broadcast or a tape.**

- ① Set to the required source

	Operations
CD play	Load a disc and press the ▷■ button to play the disc.
Tape playback	Load a cassette and press the ▷ or ◁ button to play back the tape.
Broadcast	Press the TUNER/BAND button to set to the tuner mode and tune to the required frequency.

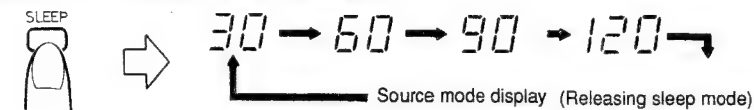
- ② Press the SLEEP button to set to the sleep time.



- The sleep operation will start and the power will be switched off after the specified time.
- **Checking the sleep time**  
When the SLEEP button is pressed, the remaining sleep time is displayed. If it is pressed again, a new sleep time can be set.
- **To cancel the sleep operation**  
Press the POWER button to switch the power off.
- Sleep times of 30, 60, 90 or 120 minutes can be set. When you release the SLEEP button, the source is displayed after 10 sec.

**B. To fall asleep while listening to a broadcast or CD and to perform timer playback the following morning**

1. Set the timer playback start and stop times. (See the "Setting the timer" on page 58.
2. Set the timer mode and volume. (See "Setting the timer" on page 58.)
3. Set to the required source (broadcast, tape or CD).
4. Press the SLEEP button to set the sleep time.



- Any required source can be selected when performing the sleep operation and timer playback. For example:
  - CD play for sleep operation and broadcast reception for timer playback.
  - Tape playback for sleep operation and CD play for timer playback.However, when broadcast reception is selected for both sleep operation and timer playback, the station you were listening to at night will be tuned to the following morning.

## 6 Location of Main Parts

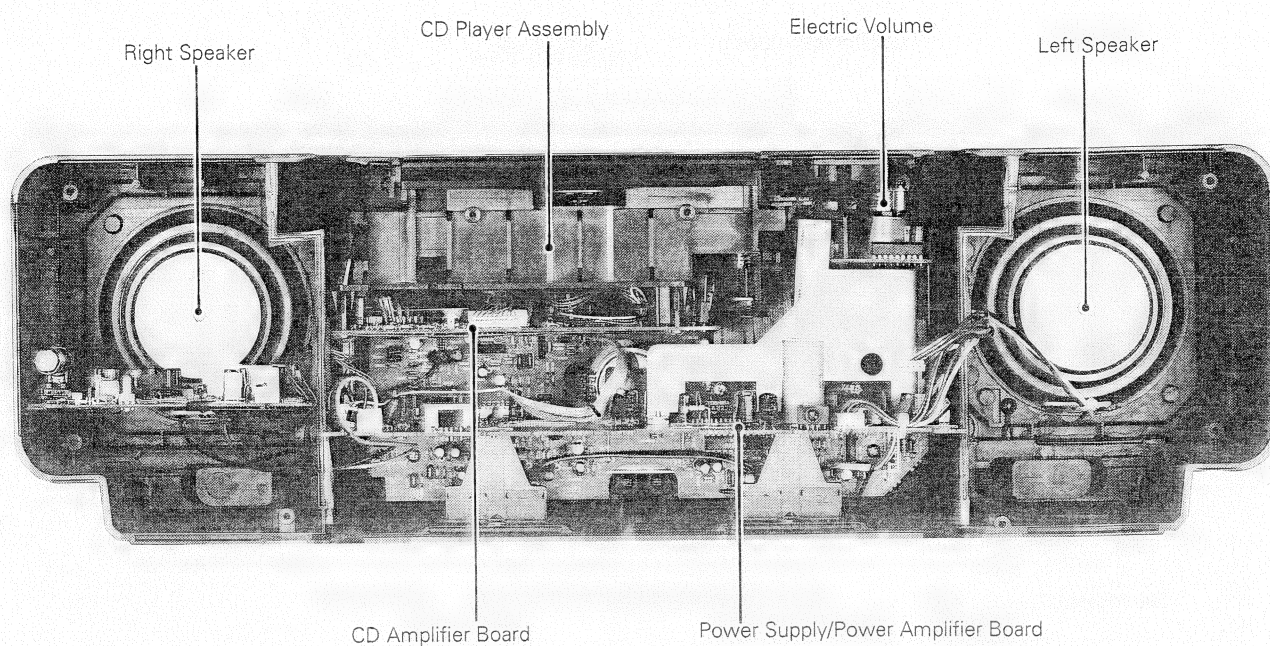


Fig. 6-1

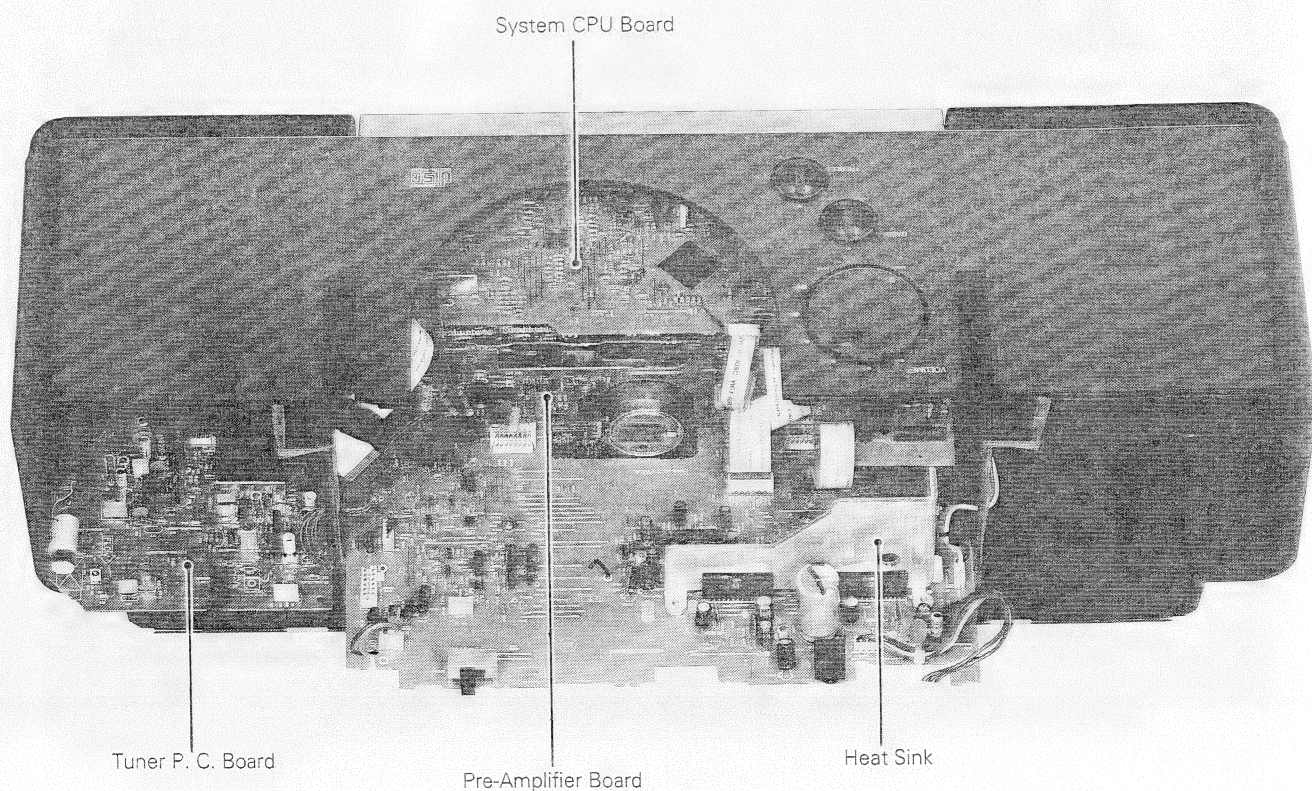


Fig. 6-2

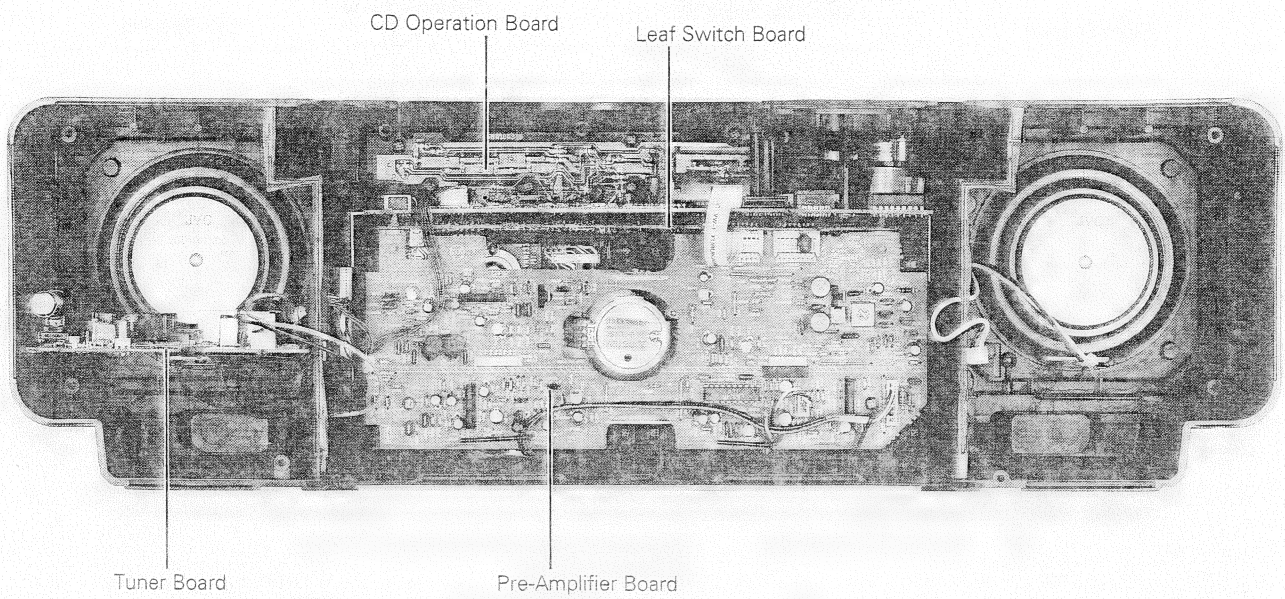


Fig. 6-3

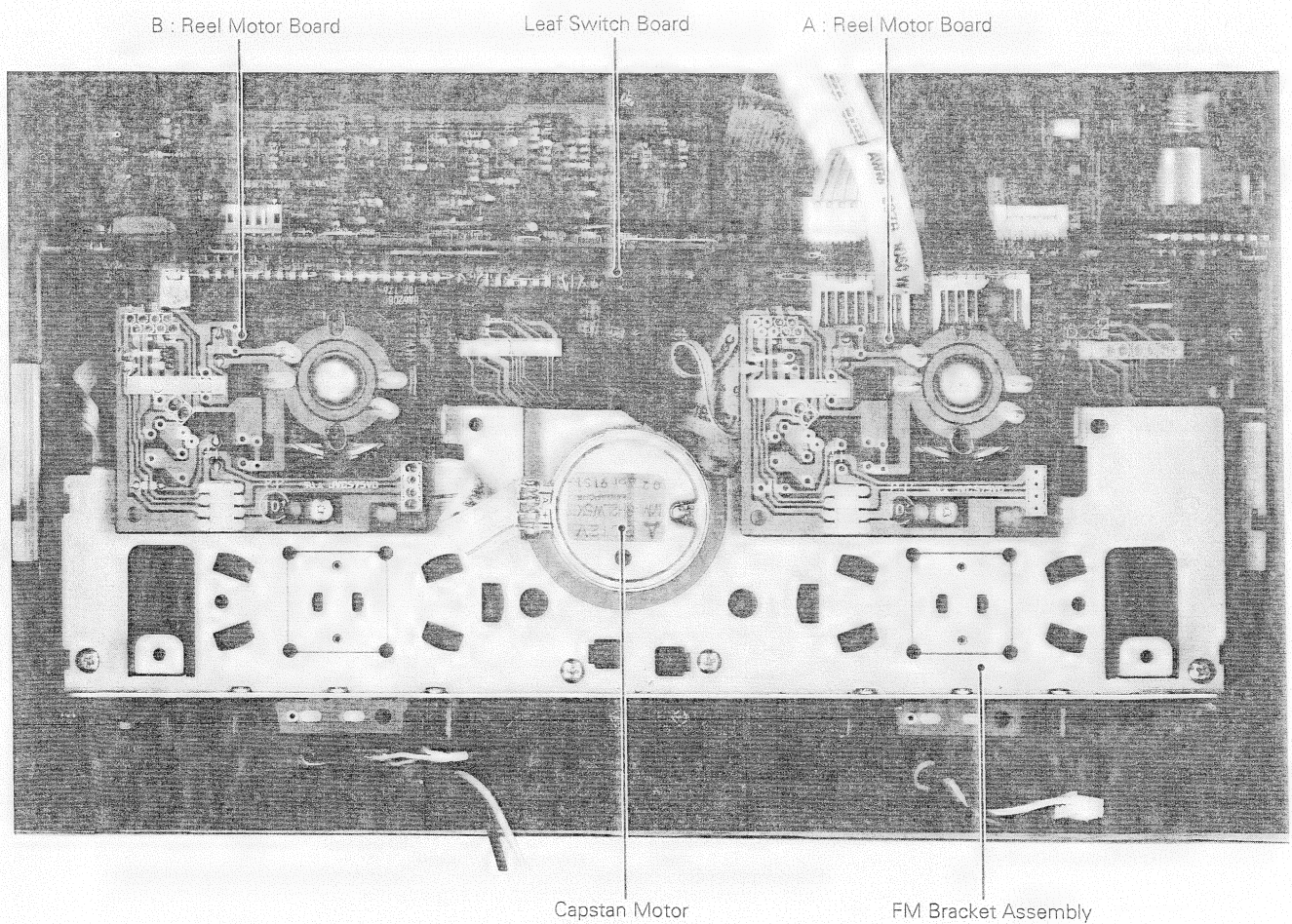


Fig. 6-4



### ■ CD Player Section

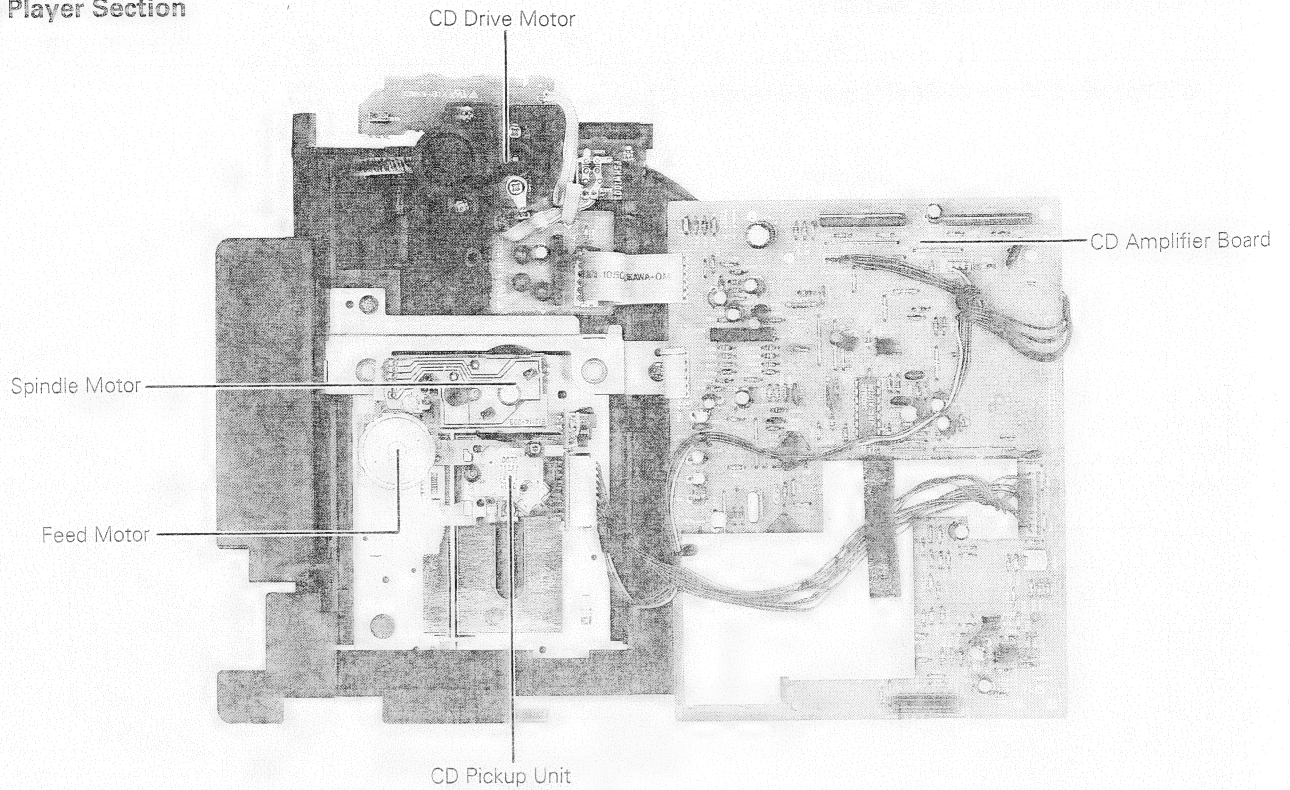


Fig. 6-5

### ■ Cassette Mechanism Section

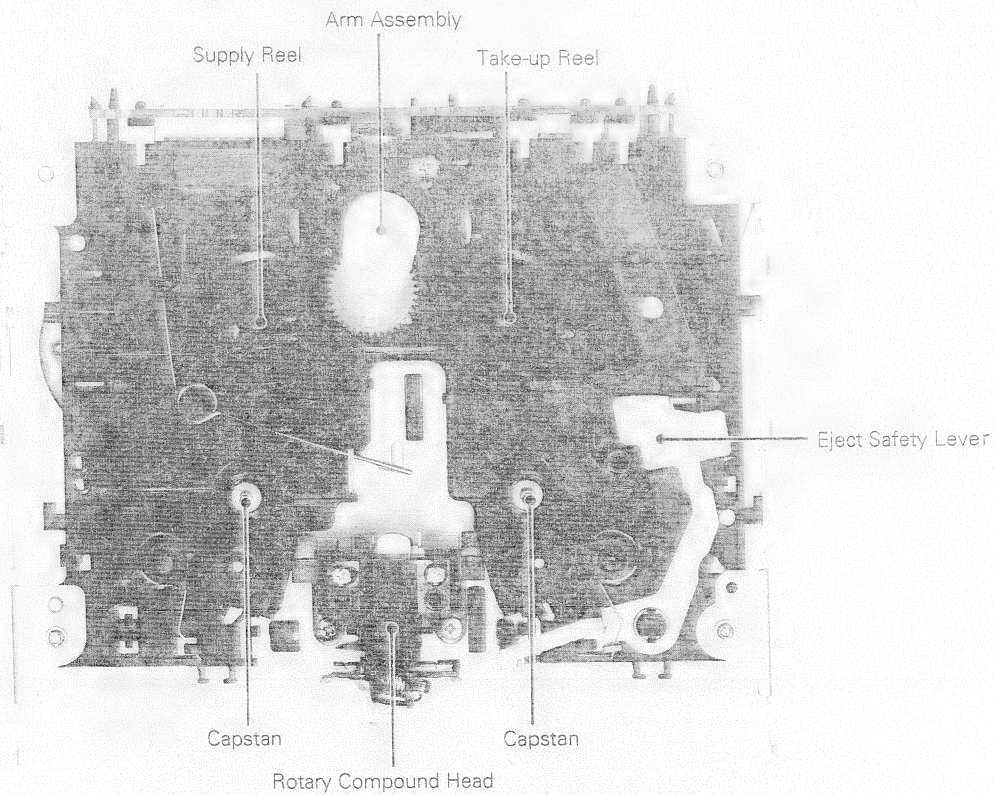
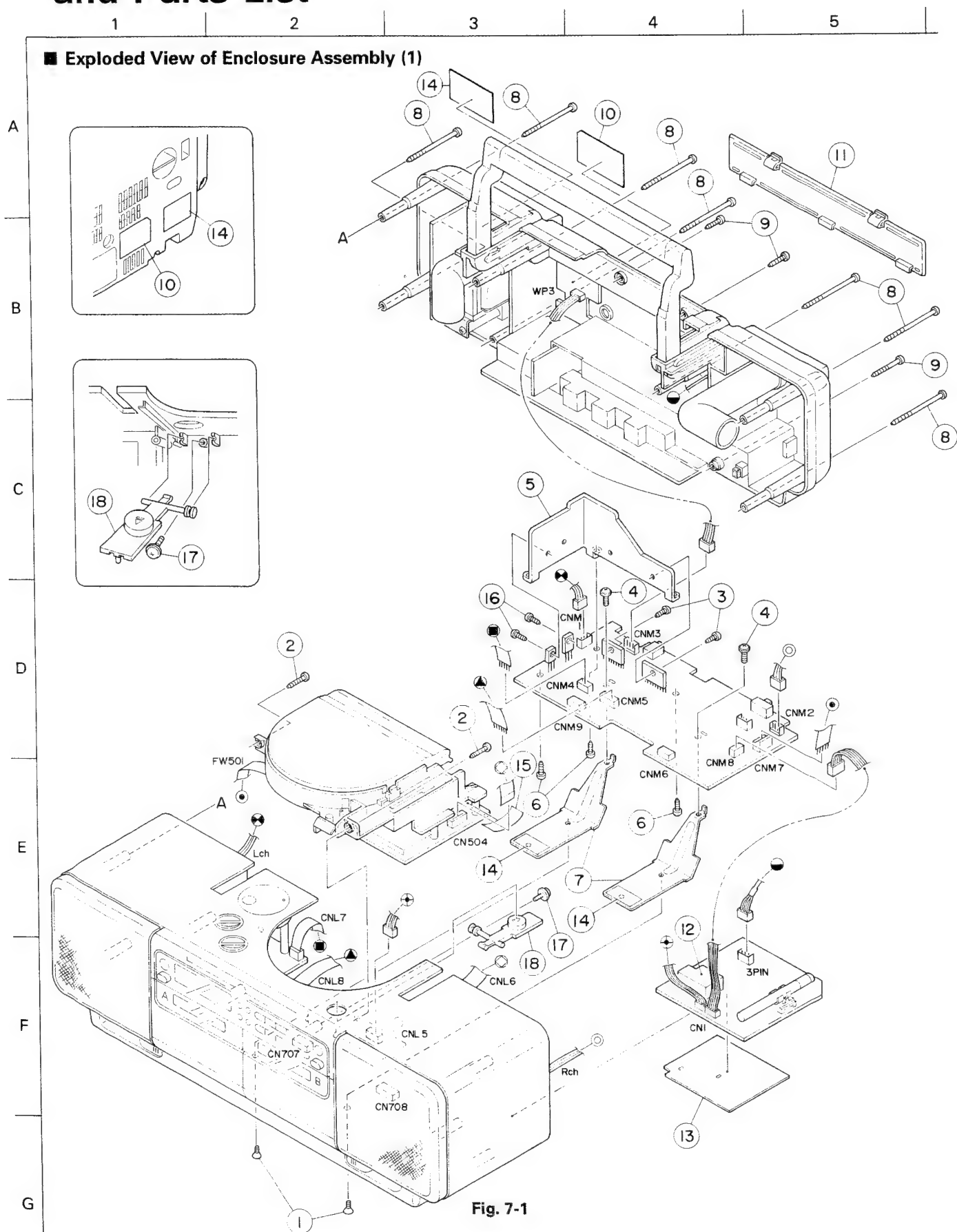


Fig. 6-6

## 7 Removal of Main Parts with Exploded View and Parts List



**Fig. 7-1**

## ■ Enclosure Assembly Parts List (1)

△ Parts are safety assurance parts.  
When replacing those parts, make sure to use the specified one.

BLOCK NO. **M11M** □ □ □

△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	SSST3008Z	SCREW	SHIELD BRK+F.CA	2		
2	SBSF3012Z	SCREW	F.CABI+CD UNIT	2		
3	SDSP3010Z	SCREW		2		
4	GBST3008Z	SCREW	SHIELD BRK+PWB	2		
△ 5	VYH3700-003	RADIATION		1		
6	SBSF3008Z	SCREW		3		
7	VYH3694-002	SHIELD BRACKET	EGC T1.2	2		
8	SBSF3050Z	SCREW	FRONT+REAR	7		
9	SBSF3014N	SCREW	FOR FRONT+REAR	1		
	SBSF3014N	SCREW	REAR+CD UNIT	2		
10	VYN5158-005T	NAME PLATE	FOR JES	1		
11	VJC2016-008S	BATTERY COVER		1		
12	VMA4482-001	SHIELD CASE		1		
13	VMA4532-001	SHIELD		1		
14	VND4221-001	CLASS 1 LABEL		1		
15	VYSB1R3-015	SPACER	WIRE	1		
16	SDSP3010Z	SCREW		2		
17	E65923-005	TAP. SCREW	CD E.KNOB+F.CAB	1		
18	VXP5067-001	CD EJECT KNOB	ABS	1		

## ■ Rear cover assembly (Fig. 7-1, Fig. 7-2)

1. Remove seven screws ⑧ retaining the rear cover ass'y.
2. Remove three screws ⑨ retaining the rear cover ass'y.
3. Remove the rear cover ass'y from the front cover ass'y.
4. Disconnect the 3-pin connector of the antenna wire connected with the rod antenna from the 3-pin connector of the tuner board.
5. Disconnect the 4-pin connector connected with the connector CNM3 of the power amp. board from the connector WP3 of the rectifier board.

## ■ CD player assembly (Fig. 7-1, Fig. 7-2)

1. Remove two screws ② retaining the CD player ass'y.
2. Disconnect the 7-pin connector of the parallel wire connected with the connector CNL6 of the system CPU board on the front cover ass'y from the connector CN504 of the CD control board.
3. Disconnect the 6-pin connector of the parallel wire connected with FW501 on the CD control board from the connector CNM7.

## ■ Tuner board (Fig. 7-1)

1. Remove the wire bushing retaining wires connected with the tuner board.
2. If necessary for repair, disconnect the 5-pin plug connected with the connector CN1 of the tuner board from the connector CNM8 of the power amp board.
3. If necessary, disconnect the parallel wire from the connector CNL5 of the CPU board and the black wire from the connector CNL3.

## ■ Power amp. board (Fig. 7-1, Fig. 7-4)

1. Stand the set on its front cover ass'y.
2. Remove two screws ① retaining the power amp. board ass'y from the front cover ass'y.
3. Pull the power amp. board out of the connectors CN708 and CN707 of the preamp. board.
4. Pull the 2-pin plugs connected with the right and left speakers out of the connectors CN11 and CN12 of the power amp. board.

5. Disconnect two parallel wires connected with CNL8 and CNL7 of the system CPU board from the connectors CN15 and CN14 of the power amp. board, then draw out the power amp. board.

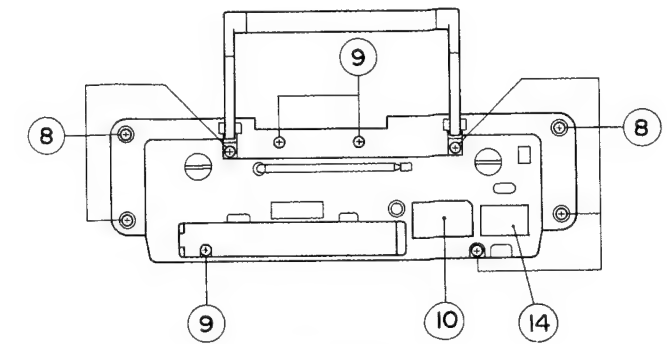


Fig. 7-2

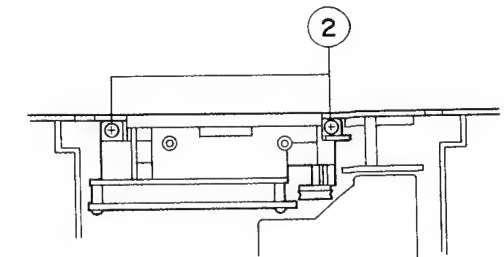


Fig. 7-3

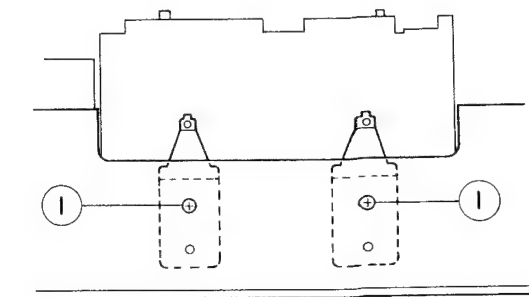
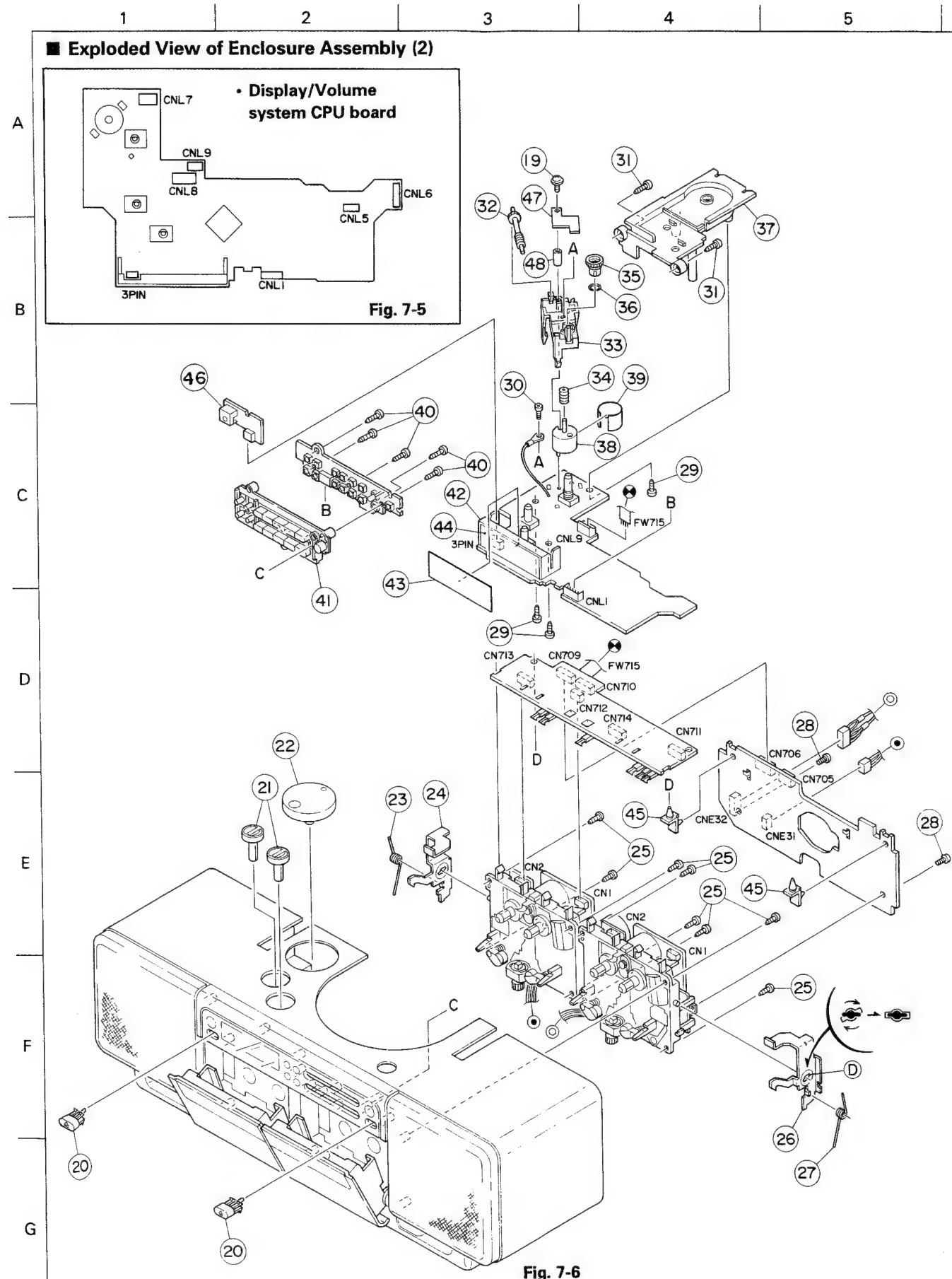


Fig. 7-4



### ■ Eject lever (24), (26) (Fig. 7-7, Fig. 7-8)

1. Remove a spring (27) pressing the eject lever (26) on the right side of the cassette mechanism. (It is suggested to disengage the shorter end of the spring first.)
2. Remove the spacer and screw for the stopper retaining the eject lever.
3. Turn the disengaging lever (24) retaining the eject lever (26) to the cassette mechanism to disengage it as indicated by the arrows in Fig. 7-6.

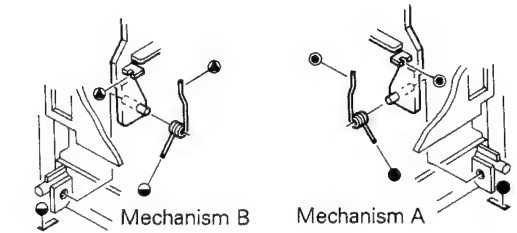


Fig. 7-7

Fig. 7-8

### ■ Leaf switch board (Fig. 7-9)

1. Disengage eight pawls (E, F, G, H, two each) retaining the leaf switch board on the top of the cassette mechanism with pliers, etc.
2. Disconnect two connectors (CN713, CN714) of the leaf switch board from the connector CN2 of the cam switch board of the mechanisms A and B respectively.
3. Remove the joint holders (45) from the both sides of the leaf switch board.

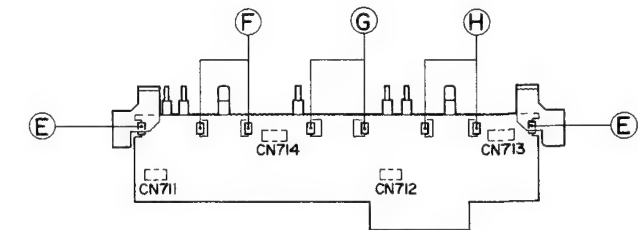


Fig. 7-9

### ■ Enclosure Assembly Parts List (2)

BLOCK NO. M2MM							
REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR	
19	DPSP2014Z	SCREW		1			
20	VXP5066-00A	EJECT KNOB	INSERT PARTS AB	2			
21	VXL4393-001	KNOB	tone	2			
22	VXL4392-001	KNOB	MAIN VOL	1			
23	VKW4923-002	T.SPRING(L)	FOR EJECT ARM(L)	1			
24	VYH3685-002	EJECT ARM		1			
25	SBSF3012Z	SCREW	MECHA+F.CABI	8			
26	VYH3686-002	EJECT ARM(R)	EGC T1.2	1			
27	VKW4923-102	T.SPRING(R)	FOR EJECT ARM(R)	1			
28	SBST3006Z	SCREW	FOR PRE PWB+MEC	2			
29	SBSF3010Z	SCREW	VOL HOL+PWB	3			
30	DPSP2005Z	SCREW	FOR MOTOR	1			
31	SBSF3010Z	SCREW	VOL.HOL+F.CAB	2			
32	VYH7534-002	WORM(A)		1			
33	VYH3698-001	GEAR BASE		1			
34	VYH7535-001	WORM(B)		1			
35	VYH7533-001	GEAR		1			
36	VYH7536-001	SPRING		2			
37	VYH2262-001	VOLUME HOLDER	MIPS	1			
38	MDN-4RB7MYA-1	A.MOTOR	MV301	1			
39	FE-ZMS449	MOTOR SHIELD		1			
40	SBSF3010Z	SCREW	FOR PUSH KNOB	5			
41	VXP3460-003	PUSH KNOB	TACT SW. SILKX1	1			
42	VYH3750-002	LCD HOLDER	ABS	1			
43	FSYT4002-001	FILTER		1			
44	VGL1125-001	LCD	LCD81	1			
45	VYH7606-001	P.W.BRACKET		2			
46	VYH7237-002	IC HOLDER		1			
47	VKY4657-001	SPRING	FOR MOTER	1			
48	VKH3000-151	COLLAR	FOR VOL MOTER N	1			



### ■ Cassette mechanism/Preamp board assembly

(Fig. 7-10)

1. Remove eight screws (25) retaining the cassette mechanism/preamp board ass'y.
2. Disconnect the parallel wire connected with FW715 of the leaf switch board from the connector CNL9 of the LCD display operation/volume/system CPU board.
3. Press the eject buttons of the both mechanisms A and B to open the cassette doors, and draw the cassette mechanism/preamp board ass'y out of the front cover ass'y respectively.

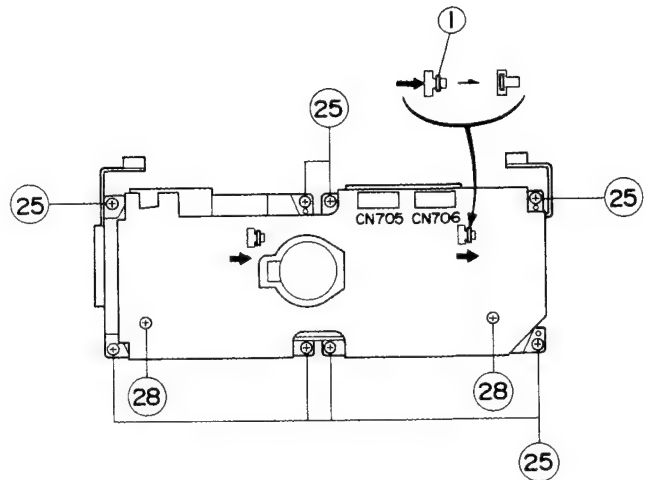


Fig. 7-10

### ■ Preamp. board (Fig. 7-10)

1. Remove two screws (28) retaining the preamp. board.
2. Disengage two pawls (1) retaining the preamp. board from the grooves of the board by moving the board as indicated by the arrow in Fig. 7-7.

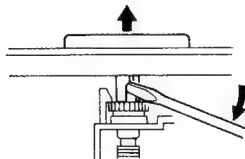


Fig. 7-11

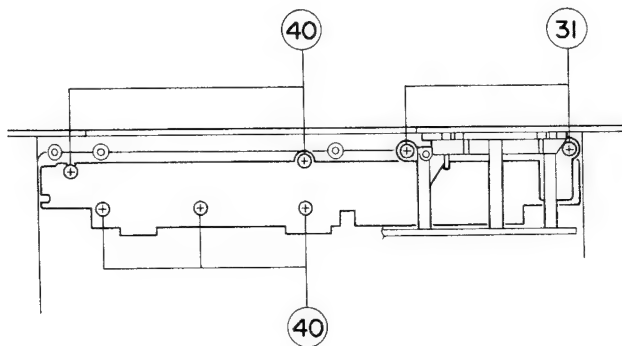


Fig. 7-12

### ■ Remote control sensor board (Fig. 7-6)

Pull the remote control sensor board out of the 3-pin connector of the display, volume/system CPU board.

### ■ Volume motor (Fig. 7-13)

1. Remove three screws (29) retaining the volume holder (37) from the display, volume/system CPU board.
2. Unsolder at two points (C) connecting the volume motor 38.
3. Disengage three pawls (A, B, C) of the volume holder (37) retaining the volume motor (38).
4. Remove the screw (30) retaining the volume motor (38) and the gear base (33).

### ■ Display, volume/system CPU/operation switch board (Fig. 7-11, Fig. 7-12)

1. Remove respective knobs of the VOLUME, BASS and TREBLE controls.

**Note:** Turn the volume knob by hand until the slit of the volume knob appears as shown in the figure. Set an ordinary (-) screwdriver to the slit and push the volume knob in the direction of the arrow to remove it. Remove the BASS and TREBLE knobs in the same manner.

2. Remove five screws (40) retaining the display, volume/system CPU/operation switch board assemblies.
3. Remove two screws (31) retaining the volume holder (37) from the front cover ass'y side.

### ■ Operation switch board/remote control sensor board

Disconnect connection between the connector CNL3 of the operation switch board and the connector CNL1 of the display/volume/system CPU board.

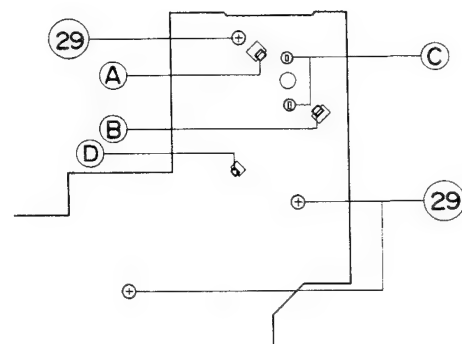


Fig. 7-13

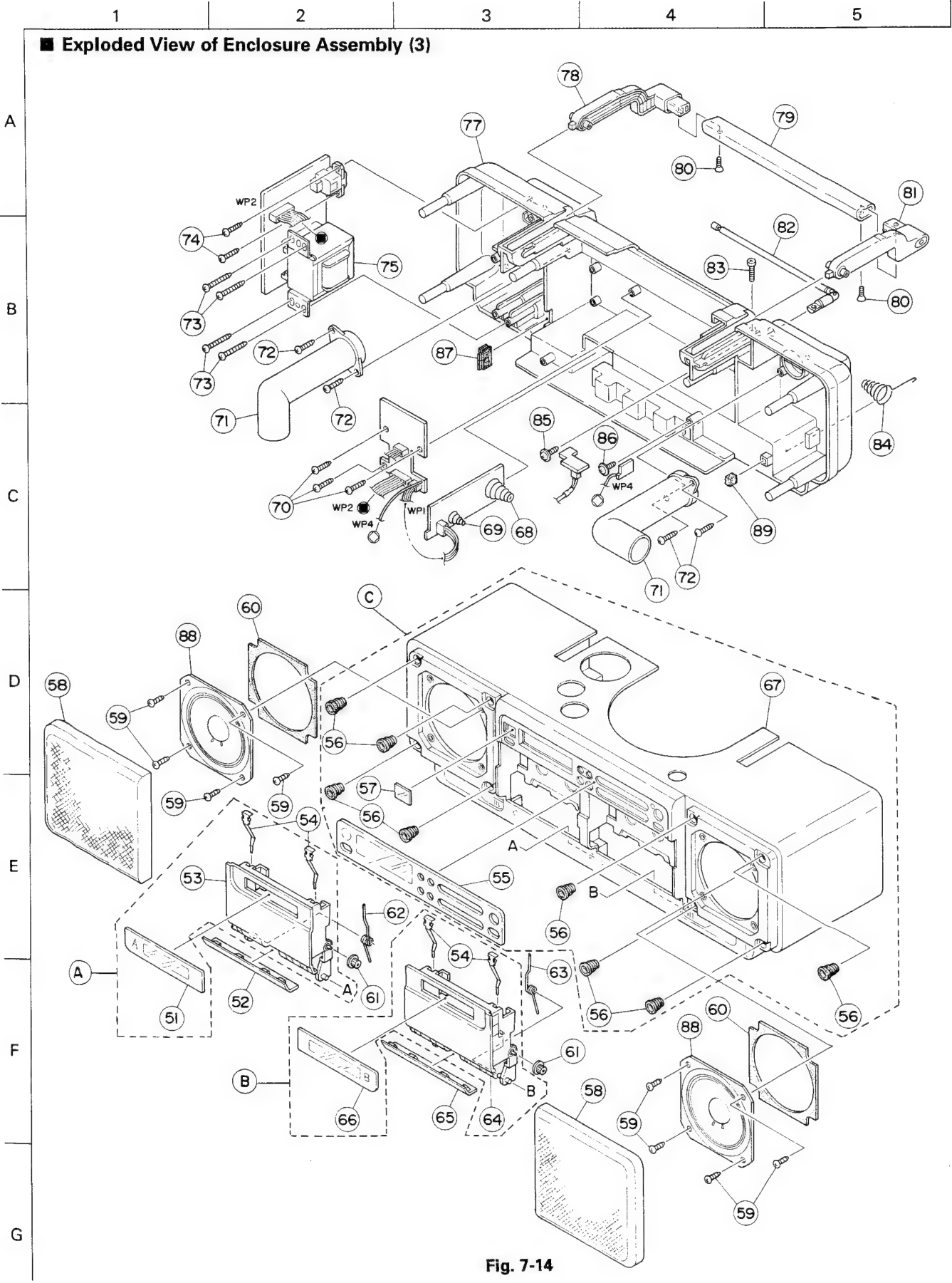


Fig. 7-14

## ■ Enclosure Assembly Parts List (3)

△ Parts are safety assurance parts.  
When replacing those parts, make sure to use the specified one.

BLOCK NO. M3MM

△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	ZCRCB1K-CBA	CASSETTE CASE	REF.51,53,54	1		
B	ZCRCB1K-CBB	CASSETTE CASE	REF.54,64,66	1		
C	ZCRCB1K-FB	FRONT CABINET	REF.55,56,57,67	1	B,E,G	
49	FSMA4003-001	ANTENA SHEILD	ANT,SHIELD	1		
50	VYH7607-001	WIRE BUSHING(F)		1		
51	VJT4186-002	CASSETTE LENS(L)	AS SILK2	1		
52	VYH7520-001	HEAD COVER(L)	ABS	1		
53	VJT2280-007	CASSETTE DOOR(L)	ABS	1		
54	VKY4180-001	CASSETTE SPRING		4		
55	VJD3909-005	LCD LENS	AS SILKX3	1		
56	E76030-001	CAP HOLDER		8		
57	VJD5369-001	REMOTE LENS	PVC SILK1	1		
58	VJD3901-00A	SP.NET ASSY (L)		2		
59	SBSF3008M	SCREW	FOR SPEAKER	8		
60	VYH7604-001	SPEAKER SHEET		2		
61	VYH5601-002	GEAR	(USE G333)	2		
62	VYH7511-001	DOOR SPRING(L)	SUS	1		
63	VYH7511-101	DOOR SPRING(R)	SUS	1		
64	VJT2280-104	CASSETTE DOOR(R)	ABS	1		
65	VYH7520-101	HEAD COVER(R)	ABS	1		
66	VJT4186-102	CASSETTE LENS(R)	AS SILK2	1		
67	VJG1025-005	FRONT CABINET	MIPS SILKX1	1		
68	VYH5657-001	BATTERY SPRING	WITH PWB (UM-1)	1		
69	VYH6889-001	BATTERY SPRING	WITH PWB (UM-3)	1		
70	SBSF3010Z	SCREW		3		
71	VYH3707-002	DUCT		2		
72	SBSF3012Z	SCREW	FOR DUCT	4		
73	SBSF3020Z	SCREW	TRANS+R.CABI	4		
74	SBSF3010Z	SCREW	AC SOCKET+R.CAB	2		
75	VTP57J2-12A	POWER TRANS	T999	1		
77	VJG1026-009	REAR CABINET	MIPS	1		
78	VJH3062-001	HANDLE HOLDER	(L)	1		
79	VJH4122-001	HANDLE PIPE	PVC	1		
80	VKZ4607-001	SCREW	PIPE+HOLDER	2		
81	VJH3062-101	HANDLE HOLDER	(R)	1		
82	VJA3006-00E	ROD ANTENA ASSY		1		
83	SDSP3012N	SCREW	ANT+R.CABI	1		
84	VYH5483-001	BATTERY SPRING	(UM-1)	1		
85	GBSF3008Z	TAPPING SCREW	FOR ANT PCB	1		
86	E65923-003	T.SCREW	FOR PWB 203	1		
87	VYH7608-001	WIRE BUSHING(R)		1		
88	VGS1001-010	SPEAKER		2		
89	VYSR105-021	SPACER	BATT.HOLE	1		
90	VYH7662-002	DOOR SPRING(L)	FOR SPEED ♪	1		

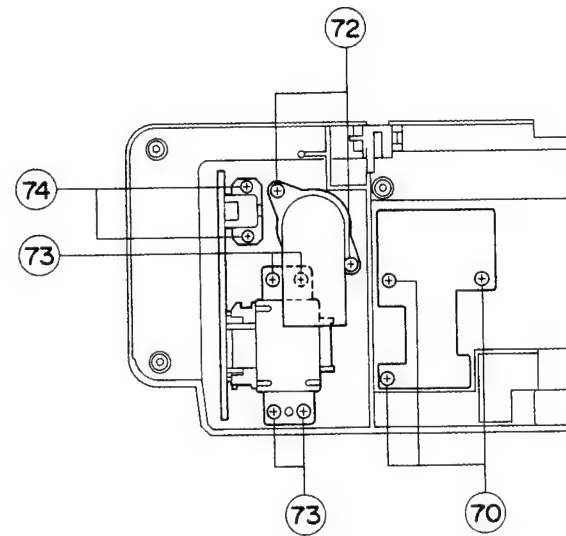


Fig. 7-15

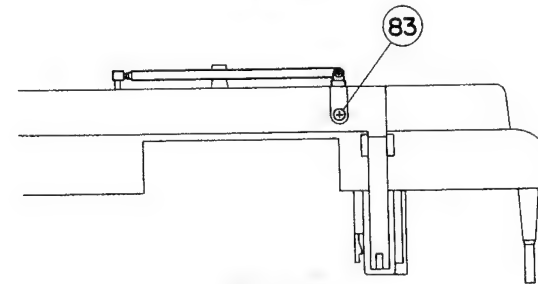


Fig. 7-16

## ■ Rod antenna assembly (Fig. 7-14, Fig. 7-16)

1. Remove three screws (70) retaining the rectifier board from the side of the rear cover ass'y.
2. Remove a screw (83) retaining the antenna terminal.
3. Disconnect the 3-pin connector which connects the tuner board.

## ■ Speaker and speaker net assembly (Fig. 7-14)

1. Inserting an ordinary (→) screwdriver into a gap between the left speaker net ass'y and the front cover, release the speaker net ass'y from the holder (56) by unlocking the disengaging lever with the screwdriver, then detach the left speaker net ass'y.
2. Remove four screws (59) retaining the left speaker (86) from the front cover ass'y side.
3. Remove the right speaker in the same manner as for the left speaker.

## ■ Cassette door assembly (Fig. 7-14)

1. Remove the left cassette door ass'y ((51),(52),(53),(54),(61)) and a spring (62) retaining the front cover ass'y.
2. Remove the right cassette door ass'y ((54),(61),(64),(65),(66)) in the same manner as the above step 1.

## ■ Front cover (Fig. 7-14)

For replacing the front cover alone, refer to the explanation about removal of the front cover ass'y (page 31) and remove the speaker net, speaker, cassette door as shown in Fig. 7-14. (Detail of removing procedure is omitted.)

## ■ Rear cover (Fig. 7-14)

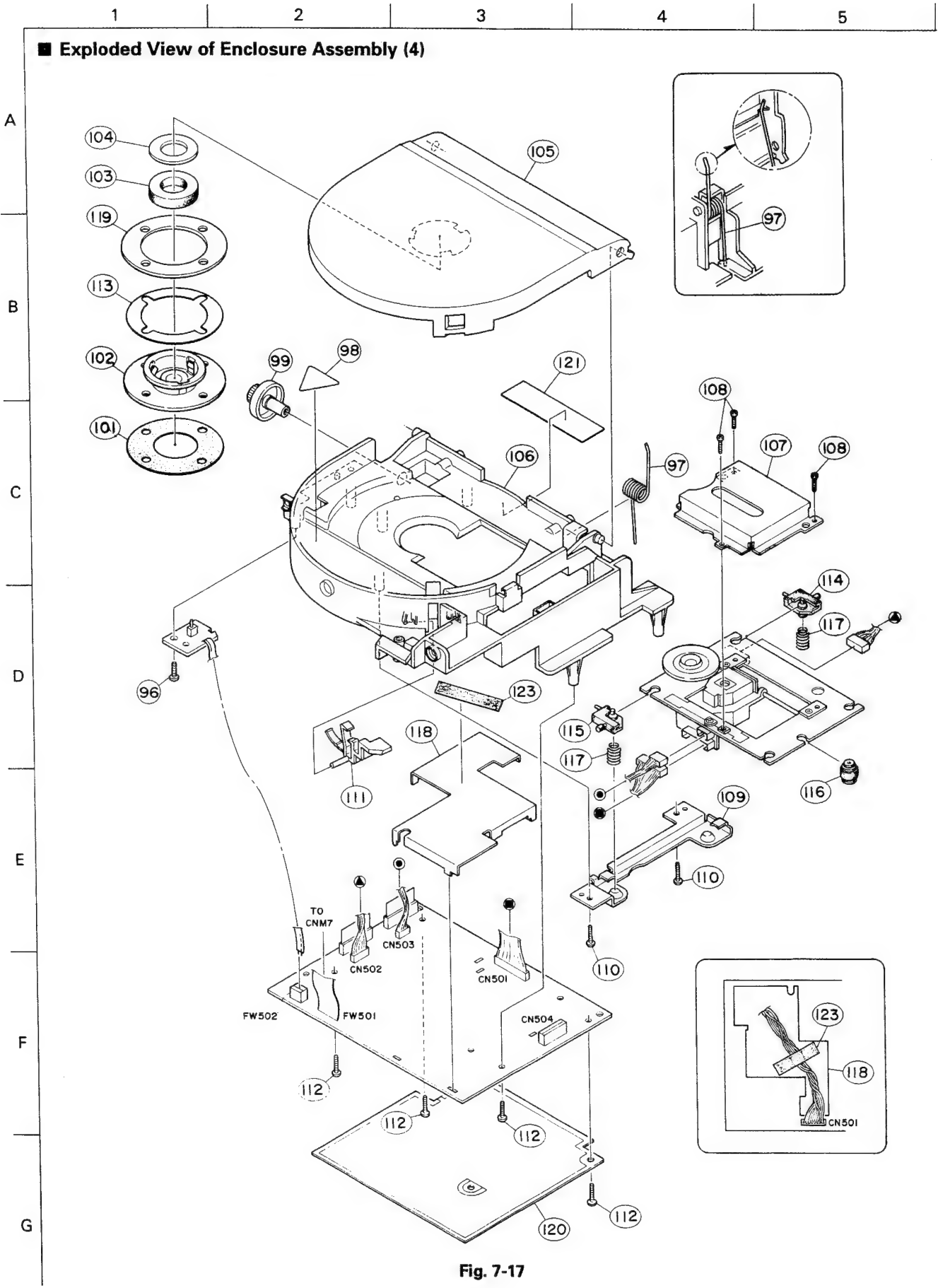
For replacing the rear cover along, refer to the explanation about removal of the rear cover ass'y (page 31) and remove the power supply board ass'y, rectifier board, ducts (71) on the both sides, handle ass'y, rod antenna ass'y, etc. (Detail of removing procedure is omitted.)

## ■ Power supply board assembly (Fig. 7-14, Fig. 7-15)

1. Remove four screws (73) retaining the power transformer from the side of the rear cover ass'y.
2. Remove two screws (74) retaining the AC socket from the side of the rear cover ass'y and take out the power supply board.

## ■ Rectifier board (Fig. 7-14, Fig. 7-15)

1. Remove three screws (70) retaining the rectifier board from the side of the rear cover ass'y.
2. Draw out the board that is fitted with springs (68) and (69) to retain UM3 and UM1 batteries.
3. Remove a screw (83) retaining the contact board.



■ Enclosure Assembly Parts List (4)

BLOCK NO. <span style="border: 1px solid black; padding: 0 2px;">M4MM</span>							
△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR	
96	SBSF3012Z	SCREW	CASE+MICRO SW.	1			
97	VKW5035-001	CD DOOR SPRING		1			
98	E71541-001	E.I.LASER MARK		1			
99	VYH4769-002	GEAR	(USE G332)	1			
101	VYH7315-001	PAD		1			
102	VYH3644-001	CLAMPER		1			
103	VYH7313-001R	MAGNET		1			
104	VYH7314-001	YOKE		1			
105	VJT1042-006	CD DOOR	ABS SILK1	1			
106	VJD1156-005	CD CASE	MIPS	1			
107	VJD5318-002	PICK COVER		1			
108	SDST2006M	SCREW	MECHA+PICK COVE	3			
109	VYH7328-002	HOLDER (L)	EGC T1	1			
110	SBSF3010Z	SCREW	CD CASE+HOLDER	2			
111	VYH7515-001	LOCK ARM	POM	1			
112	SBSF3012Z	SCREW	CD CASE+PWB	4			
113	VYTS507-001	SHEET		1			
114	VYH7327-101	CD CUSHION		1			
115	VYH7327-001	CD CUSHION		1			
116	E75609-002	INSULATOR		1			
117	VKW4924-101	CONICAL SPRING		2			
118	VMA3195-001	SHIELD(CD)		1			
119	VYH7680-002SS	PLATE		1			
120	VMA4502-004	SHIELD PLATE	FOR CD SHIELD	1			
121	VND4220-001	LASER CAUTION		1			
123	VYSA1R4-050	SPACER	WIRE	1			

### ■ CD control board (Fig. 7-18)

1. Remove four screws (112) retaining the CD control board from the CD case.
2. Pull the parallel cable connecting the CD control board out of the connector WL3 of the CD door drive motor board.
3. Pull the 10-pin connector connecting the CD pickup board out of the connector CN501 of the CD control board.
4. Pull the 6-pin connector connecting the CD spindle motor board out of the connector CN502 of the CD control board.
5. Pull the 4-pin connector connecting the CD pickup board out of the connector CN503 of the CD control board.

### ■ CD mechanism (Fig. 7-17)

1. Remove two screws (110) retaining the holder (L) (109) from the CD case (106).
2. Remove the conical spring (117) floating the CD mechanism and remove the CD mechanism from the CD case.
3. Stand the set with the CD mechanism up, then remove three screws (108) retaining the pickup cover (107).
4. For disassembly of the CD mechanism, refer to Fig. 7-19.

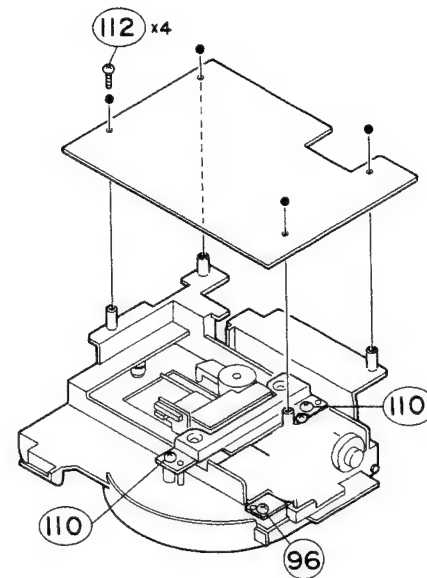


Fig. 7-18

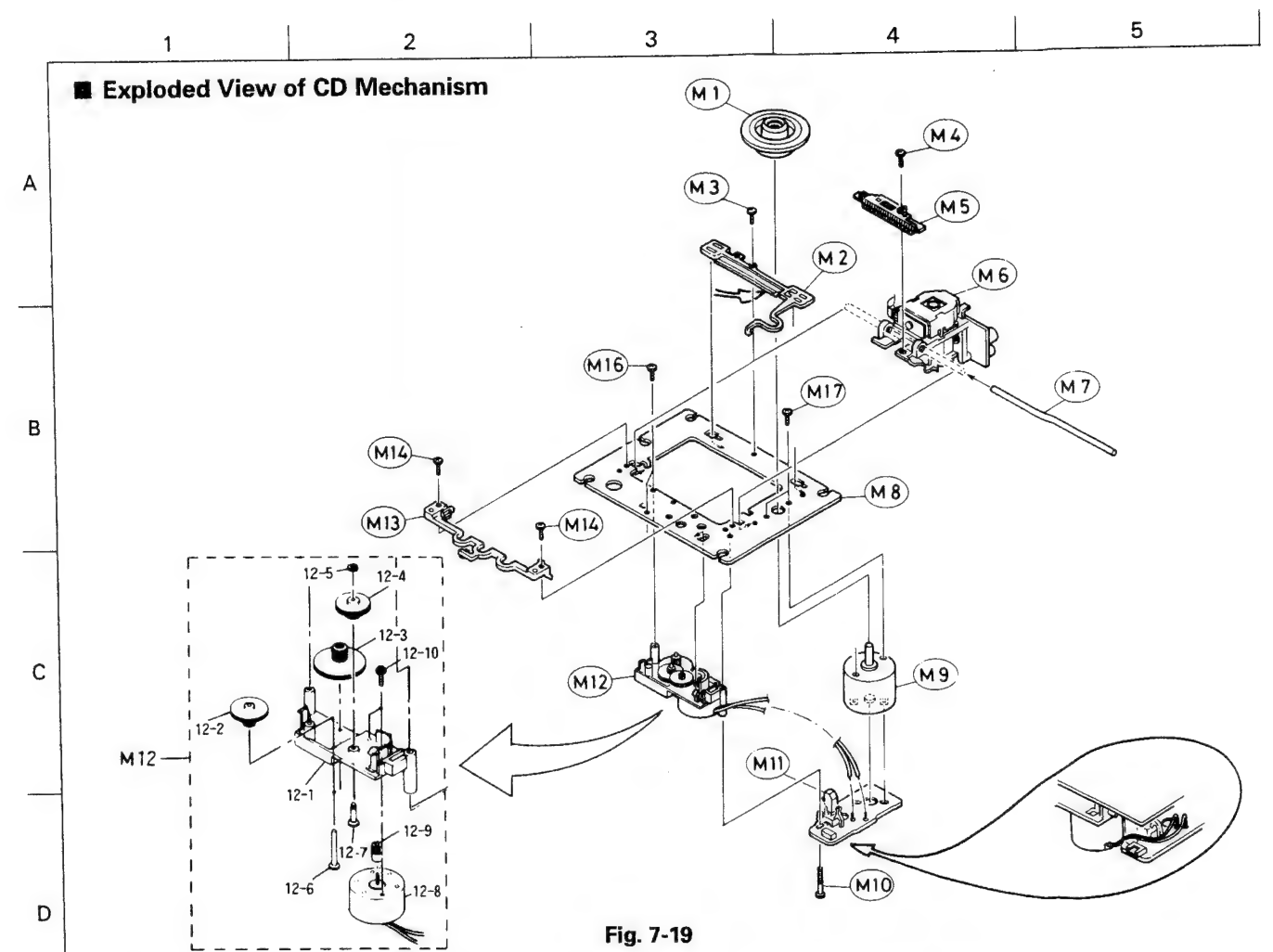
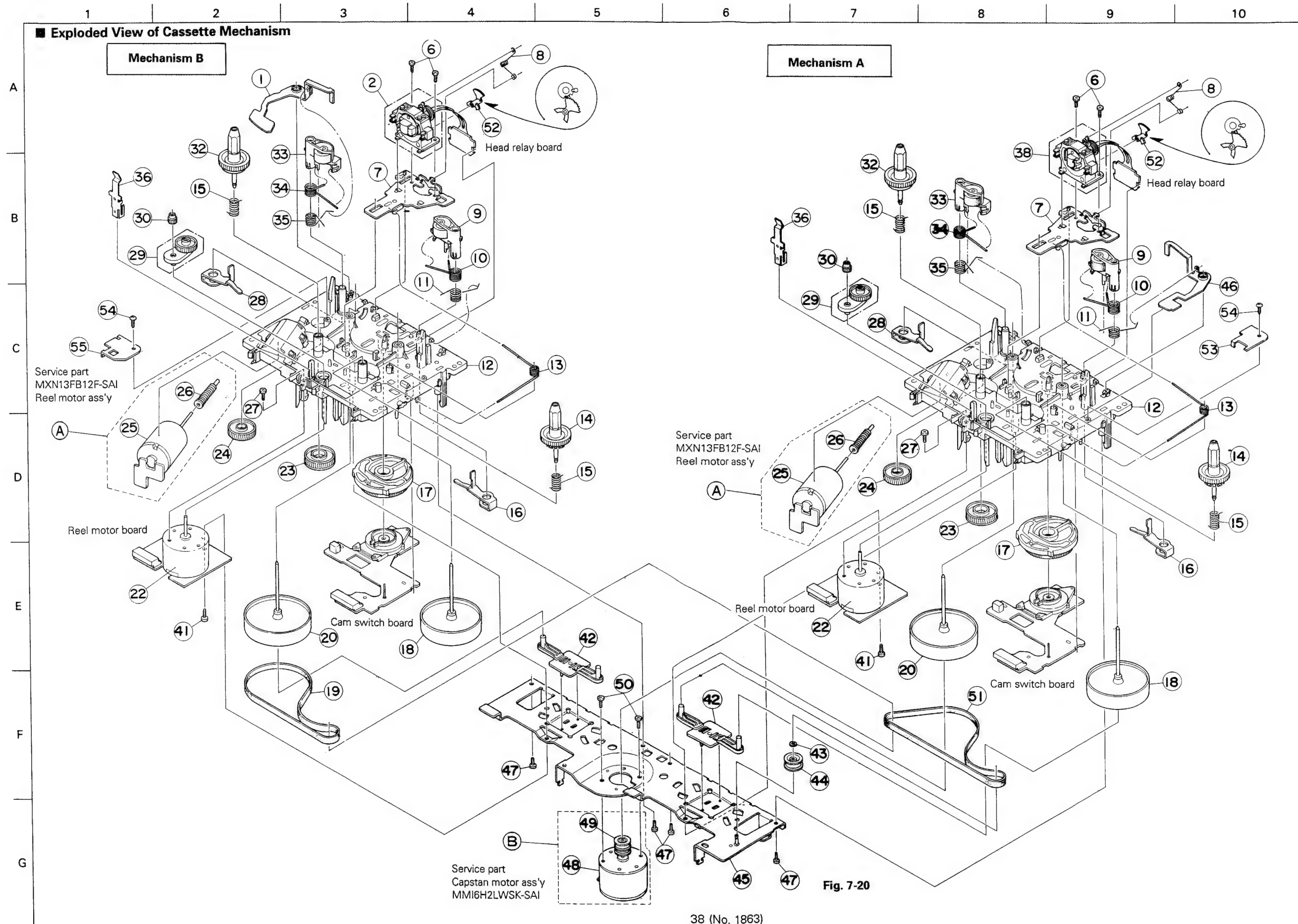


Fig. 7-19

### ■ CD Mechanism Parts List

BLOCK NO. **M5MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	E406064-002	TURNTABLE		1		
2	E306275-003	ARM SUPPORT		1		
3	SDST2005Z	SCREW		1		
4	SPSH2050M	SCREW		1		
5	E306282-001	CD RACK		1		
6	OPTIMA-5S	OPTICAL PICK-UP		1		
7	E74930-003	GUIDE SHAFT		1		
8	E26487-003	C.D.MECHA BASE		1		
9	E74539-001B	DC MOTOR		1		
10	E75832-001	SPECIAL SCREW		1		
11	ESB1100-005	LEAF SWITCH		1		
12	SE10351-11	SUB GEAR		1		
12-1	E306276-001	GEAR BASE		1		
12-2	E75444-001	CAM GEAR		1		
12-3	E75443-001	DRIVE GEAR		1		
12-4	E75445-001	CAM GEAR		1		
12-5	WDM163550	WASHER		1		
12-6	E75494-003	SHAFT PIN		2		
12-7	E75494-002	ROLLER SHAFT		1		
12-8	HKN-3A6RDNV	DC MOTOR		1		
12-9	E75493-001	PINION GEAR		1		
13	E306277-001	JOINT HOLDER		1		
14	SDST2004Z	SCREW		1		
16	E72713-001	SCREW		1		
17	SDSP2003N	SCREW		2		





## ■ Cassette Mechanism Parts List

BLOCK NO. MMMM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	MXN13FB12F-SAI	REEL MOTOR ASSY	REF.25,26	2		
B	MMI6H2LWSK-SAI	CAP.MOTOR ASSY	REF.48,49	1		
1	VKL6954-007	EJECT SAFETY(R)	B MECHA.	1		
	VKL6954-007	EJECT SAFETY(R)	B MECHA.	1		
2	VKS3570-#0B	HEAD M. ASS'Y	B MECHA.	1		
	VKS3570-#0B	HEAD M. ASS'Y	B MECHA.	1		
6	SDST2004Z	SCREW	A/MOUNT BASE	2		
	SDST2004Z	SCREW	A/MOUNT BASE	2		
	SDST2004Z	SCREW	B/MOUNT BASE	2		
	SDST2004Z	SCREW	B/MOUNT BASE	2		
7	VKL6942-00E	HEAD BASE ASSY	A MECHA.	1		
	VKL6942-00E	HEAD BASE ASSY	A MECHA.	1		
	VKL6942-00E	HEAD BASE ASSY	B MECHA.	1		
	VKL6942-00E	HEAD BASE ASSY	B MECHA.	1		
8	VKW4994-001	HEAD SPRING	A /HEAD GEAR	1		
	VKW4994-001	HEAD SPRING	A /HEAD GEAR	1		
	VKW4994-001	HEAD SPRING	B MECHA.	1		
	VKW4994-001	HEAD SPRING	B MECHA.	1		
9	VKP4221-00C	PINCH R.(L) ASY		1		
	VKP4221-00C	PINCH R.(L) ASY		1		
	VKP4221-00C	PINCH R.(L) ASY	B MECHA.	1		
	VKP4221-00C	PINCH R.(L) ASY	B MECHA.	1		
10	VKW4982-001	SPRING (L)	A/PINCH ROLLER	1		
	VKW4982-001	SPRING (L)	A/PINCH ROLLER	1		
	VKW4982-001	SPRING (L)	B/P.ROLLER	1		
	VKW4982-001	SPRING (L)	B/P.ROLLER	1		
11	VKW4933-004	TORSION SPRING	A/P.R.ARM(L)	1		
	VKW4933-004	TORSION SPRING	A/P.R.ARM(L)	1		
	VKW4933-004	TORSION SPRING	B/P.ARM(L)	1		
	VKW4933-004	TORSION SPRING	B/P.ARM(L)	1		
12	VKS1112-#01	CHASSIS B ASS'Y	A MECHA.	1		
	VKS1112-#01	CHASSIS B ASS'Y	A MECHA.	1		
13	VKW4930-002	RETURN SPRING	A/HEAD BASE	1		
	VKW4930-002	RETURN SPRING	A/HEAD BASE	1		
	VKW4930-002	RETURN SPRING	B/HEAD BASE	1		
	VKW4930-002	RETURN SPRING	B/HEAD BASE	1		
14	VKS3480-005	REEL DISK	A MECHA.	1		
	VKS3480-005	REEL DISK	A MECHA.	1		
	VKS3480-005	REEL DISK	B MECHA.	1		
	VKS3480-005	REEL DISK	B MECHA.	1		
15	VKW4928-003	B.T. SPRING	A MECHA.	1		
	VKW4928-003	B.T. SPRING	A MECHA.	1		
	VKW4928-003	B.T. SPRING	A MECHA.	1		
	VKW4928-003	B.T. SPRING	A MECHA.	1		
	VKW4928-003	B.T. SPRING	B MECHA.	1		
	VKW4928-003	B.T. SPRING	B MECHA.	1		
	VKW4928-003	B.T. SPRING	B MECHA.	1		
16	VKL6940-002	PINCH LEVER (L)	A MECHA.	1		
	VKL6940-002	PINCH LEVER (L)	A MECHA.	1		
	VKL6940-002	PINCH LEVER (L)	B MECHA.	1		
	VKL6940-002	PINCH LEVER (L)	B MECHA.	1		
17	VKS2209-005	CONTROL CAM	A MECHA.	1		
	VKS2209-005	CONTROL CAM	A MECHA.	1		
	VKS2209-005	CONTROL CAM	B MECHA.	1		
	VKS2209-005	CONTROL CAM	B MECHA.	1		
18	VKF3188-00A	FLYWHEEL(L)ASY	A MECHA.	1		
	VKF3188-00A	FLYWHEEL(L)ASY	A MECHA.	1		
	VKF3188-00A	FLYWHEEL(L)ASY	B MECHA.	1		
	VKF3188-00A	FLYWHEEL(L)ASY	B MECHA.	1		
19	VKB3001-048	BELT	B MECHA.	1		
	VKB3001-048	BELT	B MECHA.	1		
22	MMN-6F4RA38	D.C.MOTOR	A/REEL	1		
	MMN-6F4RA38	D.C.MOTOR	A/REEL	1		
	MMN-6F4RA38	D.C.MOTOR	B/REEL	1		
	MMN-6F4RA38	D.C.MOTOR	B/REEL	1		
23	VKS5331-002	ACT. GEAR (6)	A MECHA.	1		
	VKS5331-002	ACT. GEAR (6)	A MECHA.	1		
	VKS5331-002	ACT. GEAR (6)	B MECHA.	1		
	VKS5331-002	ACT. GEAR (6)	B MECHA.	1		
24	VKS5330-004	ACT. GEAR (5)	A MECHA.	1		
	VKS5330-004	ACT. GEAR (5)	A MECHA.	1		
	VKS5330-004	ACT. GEAR (5)	B MECHA.	1		
	VKS5330-004	ACT. GEAR (5)	B MECHA.	1		

BLOCK NO. M6MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
25	MXN-13FB12F	DC MOTOR ASS'Y	A/ACTUATOR	1		
	MXN-13FB12F	DC MOTOR ASS'Y	A/ACTUATOR	1		
	MXN-13FB12F	DC MOTOR ASS'Y	B/ACTUATOR	1		
	MXN-13FB12F	DC MOTOR ASS'Y	B/ACTUATOR	1		
26	VKS5329-002	ACT. GEAR (4)	A. MECHA.	1		
	VKS5329-002	ACT. GEAR (4)	A. MECHA.	1		
	VKS5329-002	ACT. GEAR (4)	B MECHA.	1		
	VKS5329-002	ACT. GEAR (4)	B MECHA.	1		
27	SDSP2605Z	SCREW		1		
	SDSP2605Z	SCREW		1		
	SDSP2605Z	SCREW	A/REEL MOTOR	1		
	SDSP2605Z	SCREW	A/REEL MOTOR	1		
28	VKL6939-002	PINCH LEVER (R)	A MECHA.	1		
	VKL6939-002	PINCH LEVER (R)	A MECHA.	1		
	VKL6939-002	PINCH LEVER (R)	B MECHA.	1		
	VKL6939-002	PINCH LEVER (R)	B MECHA.	1		
29	VKS5325-00F	FR ARM ASS'Y	A MECHA.	1		
	VKS5325-00F	FR ARM ASS'Y	A MECHA.	1		
	VKS5325-00F	FR ARM ASS'Y	B MECHA.	1		
	VKS5325-00F	FR ARM ASS'Y	B MECHA.	1		
30	VKS5328-002	GEAR	A/REEL MOUNT	1		
	VKS5328-002	GEAR	A/REEL MOUNT	1		
	VKS5328-002	GEAR	B/REEL MOTOR	1		
	VKS5328-002	GEAR	B/REEL MOTOR	1		
32	VKS5321-00D	T-UP REEL ASS'Y	A MECHA	1		
	VKS5321-00D	T-UP REEL ASS'Y	A MECHA	1		
	VKS5321-00D	T-UP REEL ASS'Y	B MECHA.	1		
	VKS5321-00D	T-UP REEL ASS'Y	B MECHA.	1		
33	VKP4219-00C	PINCH R.(R) ASY		1		
	VKP4219-00C	PINCH R.(R) ASY		1		
	VKP4219-00C	PINCH R.(R) ASY	B MECHA.	1		
	VKP4219-00C	PINCH R.(R) ASY	B MECHA.	1		
34	VKW4981-001	SPRING (R)	A/PINCH ROLLER	1		
	VKW4981-001	SPRING (R)	A/PINCH ROLLER	1		
	VKW4981-001	SPRING (R)	B/P.ROLLER	1		
	VKW4981-001	SPRING (R)	B/P.ROLLER	1		
35	VKW4932-004	TORSION SPRING	A/P.R.ARM(R)	1		
	VKW4932-004	TORSION SPRING	A/P.R.ARM(R)	1		
	VKW4932-004	TORSION SPRING	B/P.ARM(R)	1		
	VKW4932-004	TORSION SPRING	B/P.ARM(R)	1		
36	VKY4628-002	TORSION SPRING	B/P.ARM(R)	1		
	VKY4628-002	SPRING	A,B MECHA.	2		
38	VKS3569-#0B	HEAD MOUNT ASY	A MECHA.	1		
	VKS3569-#0B	HEAD MOUNT ASY	A MECHA.	1		
41	SDSF2608Z	SCREW		2		
	SDSF2608Z	SCREW		2		
42	VKS5327-003	THRUST PLATE		2		
	VKS5327-003	THRUST PLATE		2		
43	WDL163525-4	SLIT WASHER		1		
	WDL163525-4	SLIT WASHER		1		
44	VKR4631-003	IDLER PULLEY		1		
	VKR4631-003	IDLER PULLEY		1		
45	VKM3419-00E	FM BKT ASY		1		
	VKM3419-00E	FM BKT ASY		1		
46	VKL6943-005	EJECT SAFETY	A MECHA.	1		
	VKL6943-005	EJECT SAFETY	A MECHA.	1		
47	SDSF2605Z	SCREW	FOR FM BKT	4		
	SDSF2605Z	SCREW	FOR FM BKT	4		
48	MMI-6H2LWSK	MOTOR	CAPSTAN	1		
	MMI-6H2LWSK	MOTOR	CAPSTAN	1		
49	VKR4632-002	MOTOR PULLEY		1		
	VKR4632-002	MOTOR PULLEY		1		
50	SPSP2603Z	SCREW	CAPSTAN MOTOR	2		
	SPSP2603Z	SCREW	CAPSTAN MOTOR	2		
51	VKB3001-050	BELT	A MECHA.	1		
	VKB3001-050	BELT	A MECHA.	1		
53	VYH7324-004	PLATE(L)	A MECHA.	1		
	VYH7324-004	PLATE(L)	A MECHA.	1		
54	SBSF3008Z	SCREW	A MECHA.	1		
	SBSF3008Z	SCREW	A MECHA.	1		
	SBSF3008Z	SCREW	B/PLATE	1		
	SBSF3008Z	SCREW	B/PLATE	1		
55	VYH7325-005	PLATE(R)	B MECHA.	1		
	VYH7325-005	PLATE(R)	B MECHA.	1		



## ■ Removal of Cassette Mechanism Main Parts

### Mechanism A

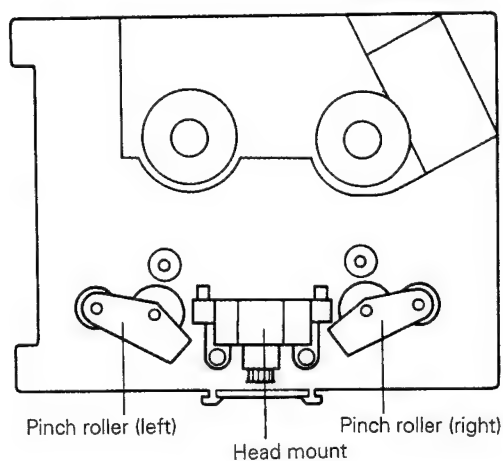


Fig. 7-21

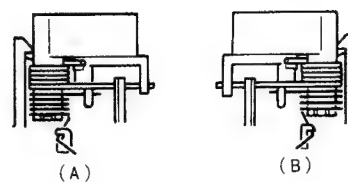


Fig. 7-22

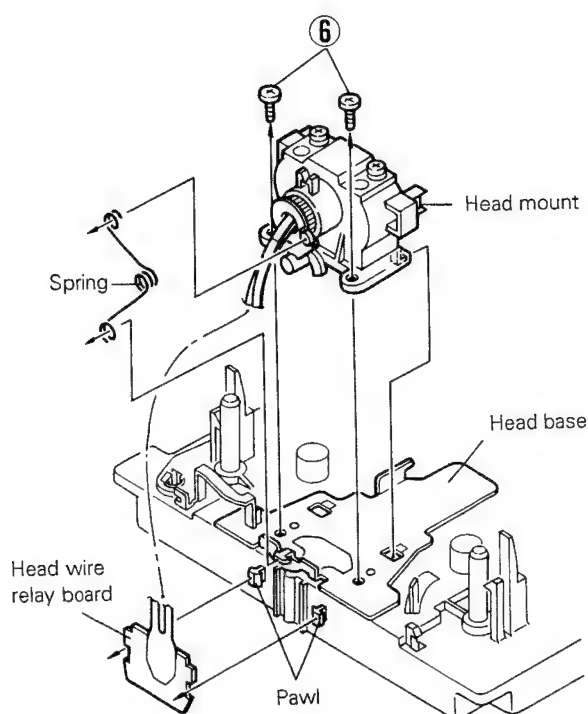


Fig. 7-23

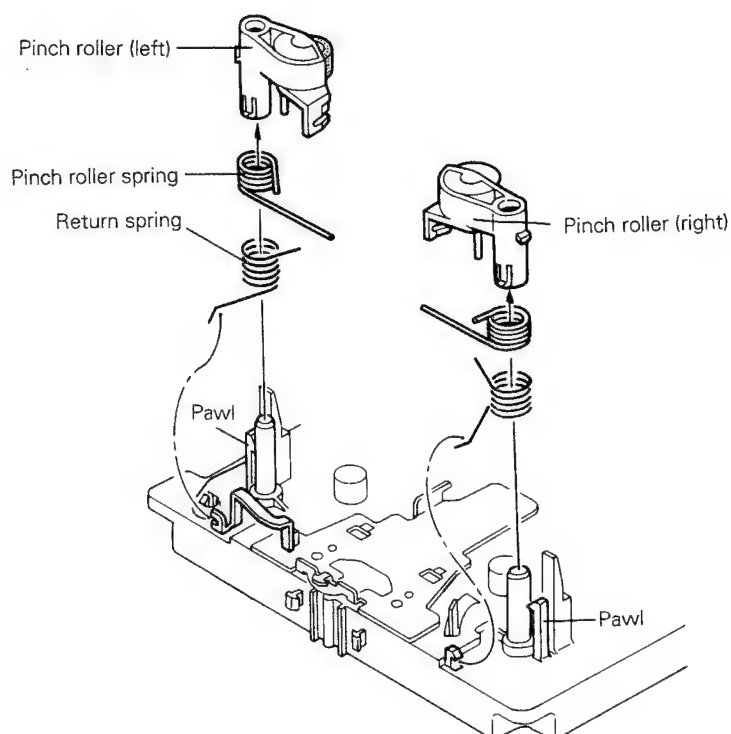


Fig. 7-24

### ■ Head mount assembly (Fig. 7-21, Fig. 7-23)

1. Disengage two pawls fixing the head wire relay board.
2. Remove two screws ⑥ retaining the head mount ass'y from the head base.
3. Remove the head gear (1) and head spring.

### ■ Pinch roller assembly (Fig. 7-21, Fig. 7-24)

1. Disengage the pawl to remove the return spring.
2. Remove the pinch roller spring.
3. For reengage the spring, see Fig. 7-22 (A) and (B).

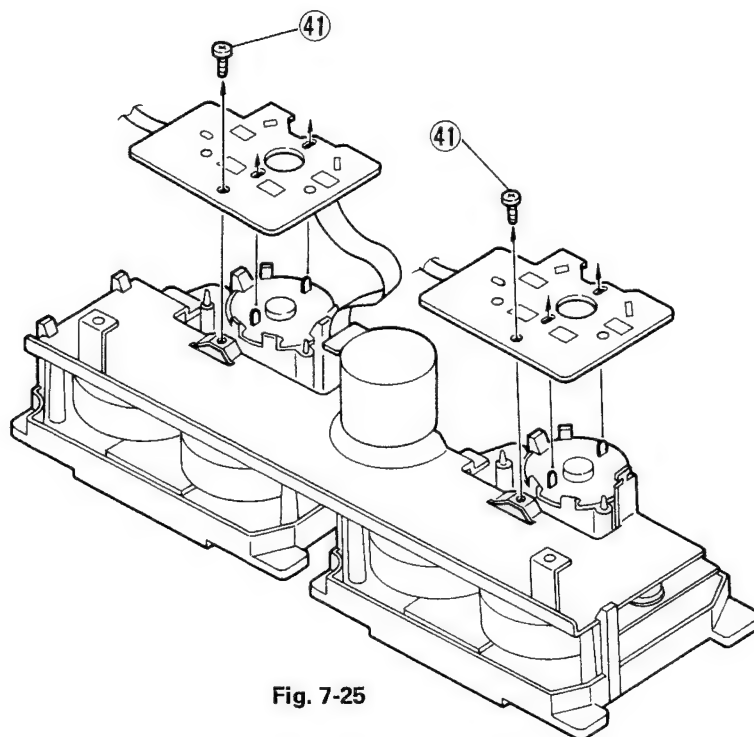


Fig. 7-25

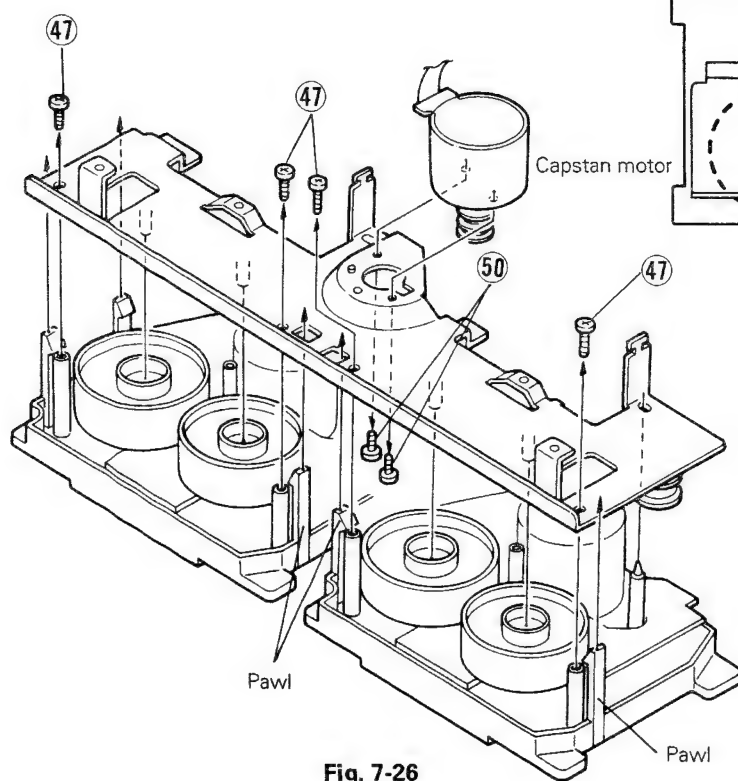


Fig. 7-26

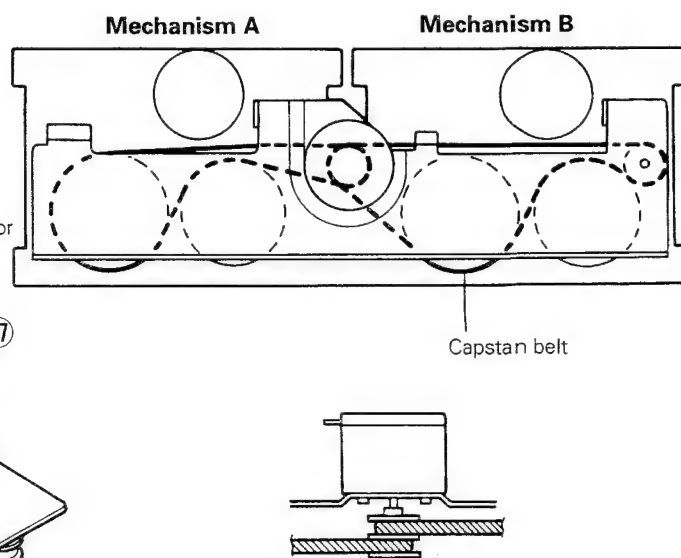


Fig. 7-27

#### ■ FM bracket/capstan motor assembly

(Fig. 7-25, Fig. 7-26)

1. Unsolder to disconnect the drive motor and the motor board. (Mechanism A or B)
2. Remove two screws (41) retaining the FM bracket and the motor board together with.
3. Remove four setscrews (47) and disengage five pawls to remove the FM bracket and capstan belt (for Mechanisms A and B).
4. Remove two screws (50) retaining the capstan motor from the FM bracket.
5. For reengaging the capstan belt, refer to Fig. 7-27.

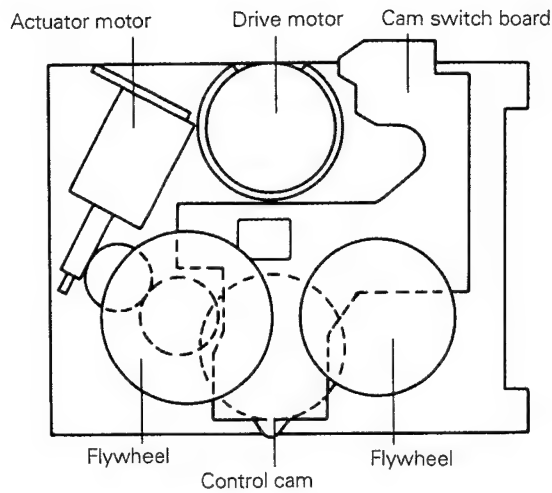


Fig. 7-28

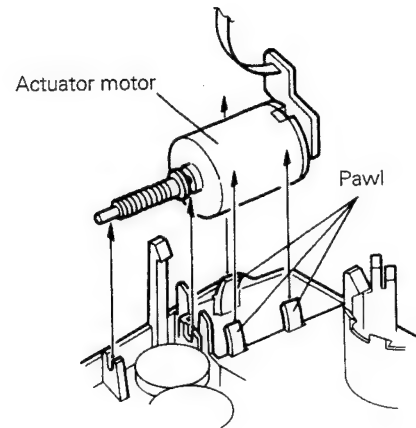


Fig. 7-29

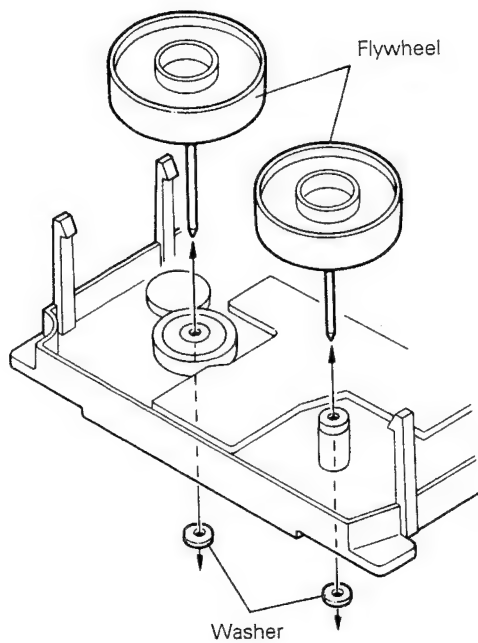


Fig. 7-30

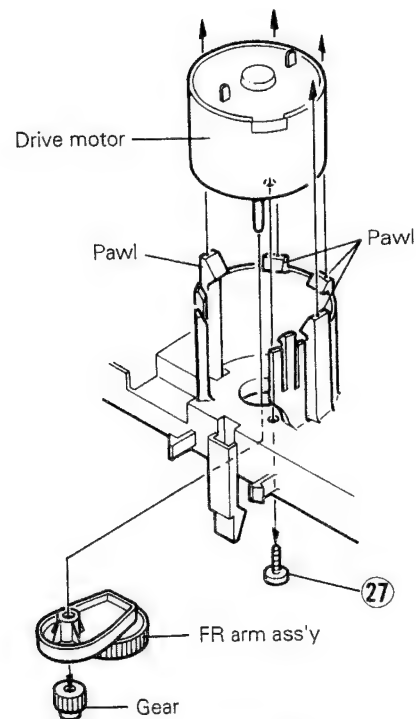


Fig. 7-31

■ **Actuator motor assembly** (Fig. 7-27, Fig. 7-28)

Disengage three pawls fixing the actuator motor ass'y.

■ **Flywheel assembly** (Fig. 7-27, Fig. 7-30)

Remove the washer from the capstan shaft and pull out the flywheel.

■ **Drive motor** (Fig. 7-27, Fig. 7-31)

1. Pull the gear and arm ass'y out of the drive motor shaft.
2. Remove a screw (27) retaining the drive motor.
3. Disengage four pawls fixing the drive motor.

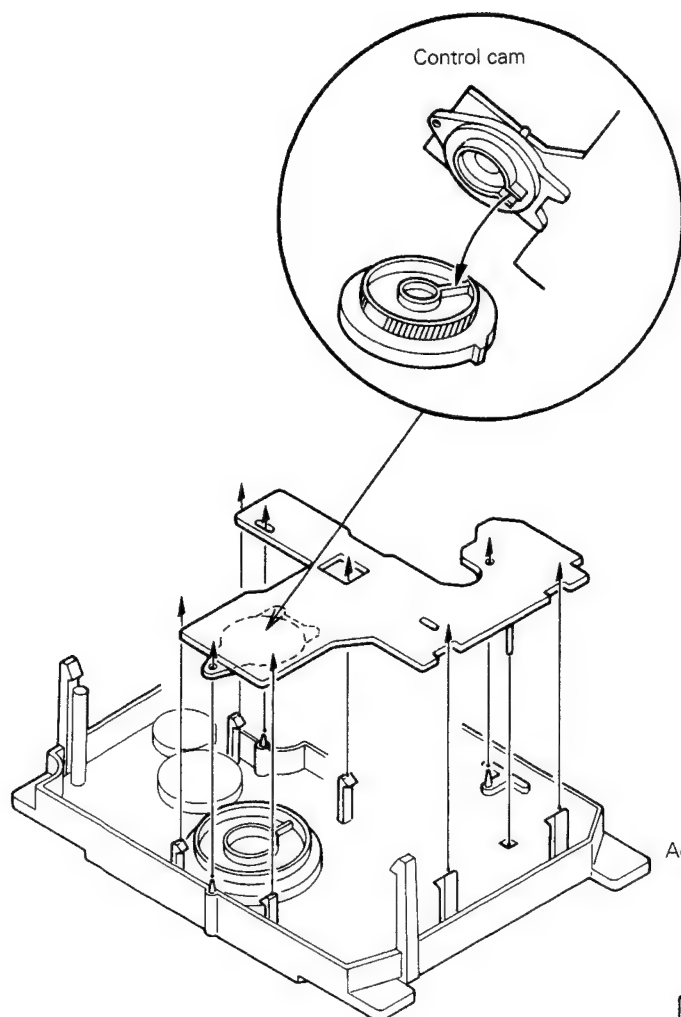


Fig. 7-32

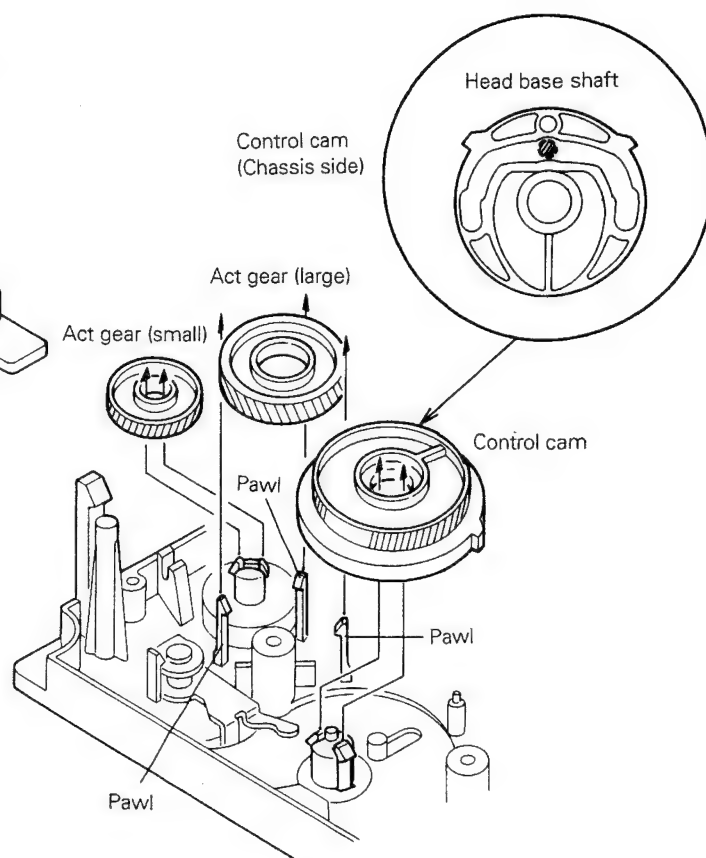


Fig. 7-33

■ **Cam switch board** (Fig. 7-27, Fig. 7-32)

1. Disengage six pawls fixing the cam switch board.
2. Engagement of the cam switch board with the control cam is shown in the circle of the figure.

■ **Actuator gear (large)** (Fig. 7-27, Fig. 7-32)

Disengage three pawls fixing the actuator gear (large).

■ **Control cam** (Fig. 7-27, Fig. 7-32)

1. Disengage two pawls fixing the control cam.
2. Engagement of the control cam is shown in the circle of the figure.

■ **Actuator gear (small)** (Fig. 7-27, Fig. 7-32)

Disengage two pawls fixing the actuator gear (small).

## 8 Main Adjustment

### ■ Test instruments required for adjustment

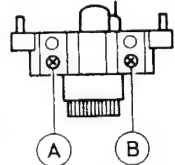
- Low frequency oscillator  
Oscillation frequency : 50 Hz to 20 kHz  
Output : 0 dBs with 60  $\Omega$  terminator
- Attenuator  
Impedance: 600  $\Omega$
- Test tapes  
VTT712 : For tape speed, wow & flutter measurement  
VTT724 : For 3 kHz reference level check  
VTT736 : For PB frequency response check  
VTT752 : For PB channel check (1 kHz)
- Electronic voltmeter
- Resistor : 600  $\Omega$  for attenuator matching
- Distortion meter
- Torque gauge : Cassette type  
for CTG-N mechanism adjustment
- Wow & flutter meter
- Frequency counter

### ■ Measuring conditions

- Supply voltage : AC 230 V, 50/60 Hz (RC-B1 E/G)  
AC 240 V, 50/60 Hz (RC-B1 B)
- Reference output : Speaker : 0 dBs (0.775 V/6  $\Omega$ )  
Headphones: 0.074 V/32  $\Omega$
- Reference input level : -8 dBs at test point TP CNM10
- Setting of volumes and switches  
FM mode : STEREO  
Main volume : for 0 dBs output  
Timer : OFF  
Tone control : Center position  
Beat cut switch : Standard

**Note:** Before check and adjustment, clean the pinch roller, capstan, shaft, heads, etc. with Freon solvent, and then demagnetize the head and capstan sections by eraser. Use demagnetized screwdriver for azimuth adjustment. Use adjusting screwdrivers having insulated shaft of 10 cm or more in the length with knob head.

### ■ Check and adjustment of amplifier section

Item	Tape to be used	Check/adjustment procedure	Adjusting point
Head azimuth adjustment	Test tape VTT703 (10 kHz)	<ul style="list-style-type: none"> <li>• For both of the mechanism A and B, playing back the test tape by the side A in the forward direction, adjust the adjusting screw (A) to maximize the headphone output while minimize the phase difference between channels. Next, playing back the test tape in the reverse direction, adjust the adjusting screw (B) for the same purpose as the forward playback.</li> <li>If head height is out of specifications, replace the head assembly.</li> <li>After the adjustment, apply screw sealant to the screws (A) and (B) for more than half a turn.</li> </ul>	 <p><b>Fig. 8-1</b></p>
Tape speed adjustment and Wow & flutter check	Test tape VTT712 (10 kHz)	<ul style="list-style-type: none"> <li>• Confirm that the tape speed is within 2950 Hz to 3070 Hz when the trailing portion of the test tape is played back. If not, adjust the semi-fixed resistor VR701. At that time, wow &amp; flutter must be 0.23% (JIS WRMS) or less.</li> <li>• Check that wow &amp; flutter is less than 0.35% (RMS) at the leading and trailing portions of the test tape.</li> <li>• The standard of the High speed is 4710 Hz to 5400 Hz.</li> </ul>	VR701
REC bias osc. frequency adjustment (Mechanism B)	TS-8	<ul style="list-style-type: none"> <li>• Connect a frequency counter to C348 and check bias leak by amplification with a valve voltmeter.</li> <li>• Adjust LB302 so that the counter reads 78 kHz <math>\pm</math> 0.2 kHz.</li> </ul>	LB302
REC/PB frequency response adjustment	TS-8 (UR)	<ul style="list-style-type: none"> <li>• Input -20 dB, 1 kHz and 100 kHz signals and 1 kHz and 10 kHz signals to the test point CNM10, and record the signals. Playing back the recorded signals, adjust VRB31 so that output level at the headphone output terminal is within 0 <math>\pm</math> 1 dB compared with speaker output level.</li> </ul> <p><b>Note:</b> This adjustment must be performed after the REC/PB bias frequency adjustment.</p>	VRB31

■ Preamp board : Location of adjusting parts

VR701 : For Tape speed adjustment

LB302 : For Bias osc. frequency adjustment

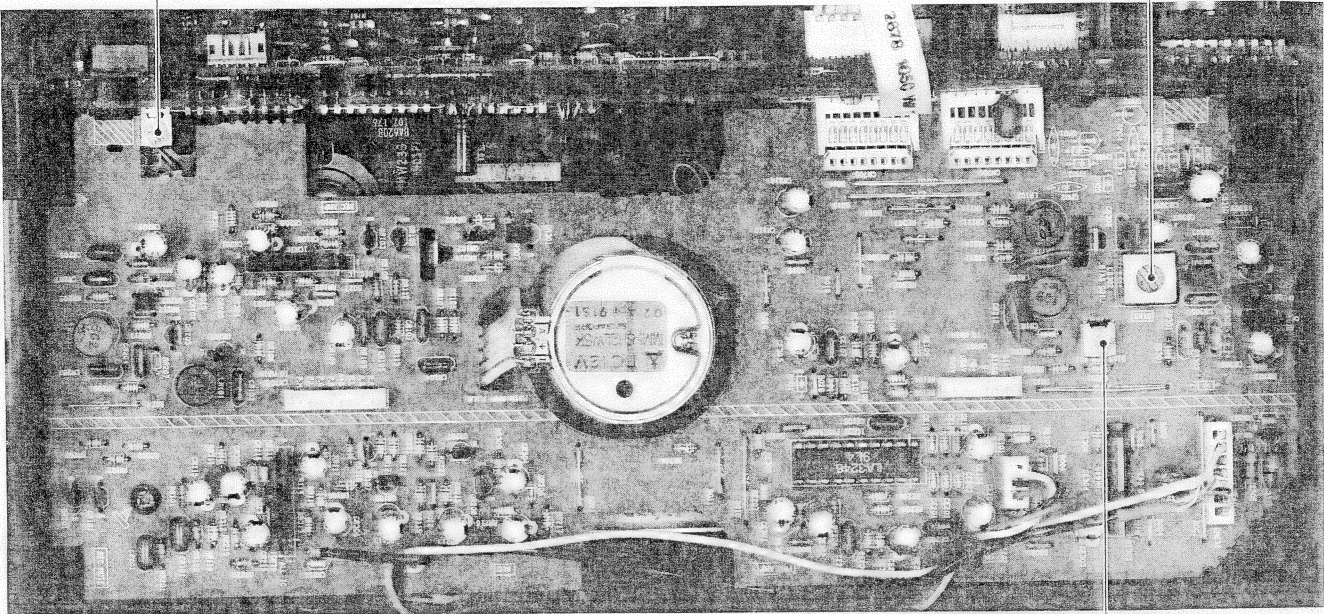


Fig. 8-2

VRB31 : For REC/PB frequency response adjustment

■ Tuner board measuring conditions

- Supply voltage : AC 230 V, 50/60 Hz (RC-B1 E/G)  
AC 240 V, 50 Hz (RC-B1 B)
- Reference output : Speaker : 50 mW (0.63 V/8  $\Omega$ )  
Headphones: 0.074 V/32  $\Omega$
- Reference input signal  
AM frequency : 1 kHz, Modulation 30 %  
FM frequency : 11 kHz, Frequency deviation 22.5 kHz
- Careful points for adjustment
  1. Connect 30 pF capacitor and 33 k $\Omega$  resistor to the output side of the IF sweeper in series while 0.082 MF capacitor and 1000 k $\Omega$  resistor to the input side in series.
  2. Set output level of the IF sweeper as minimum as adjustable.

● Tuner board : Location of adjusting parts

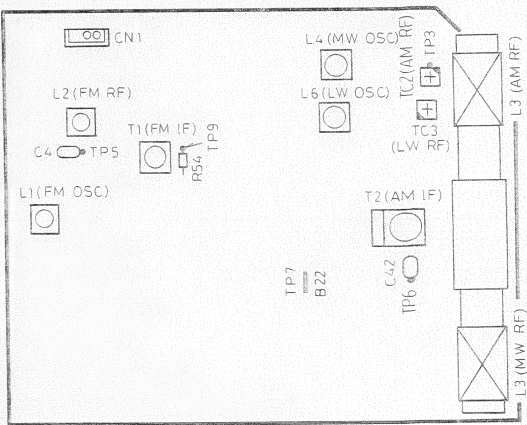
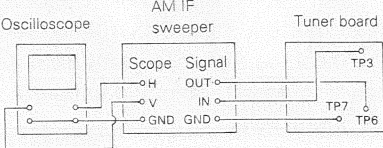
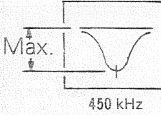
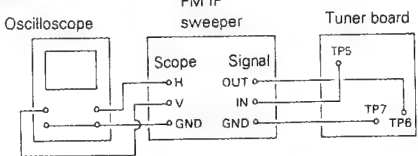
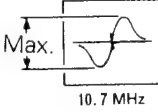
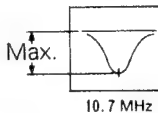
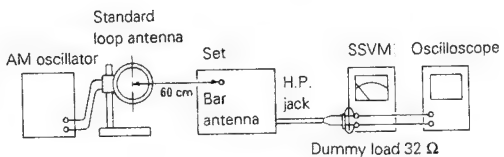
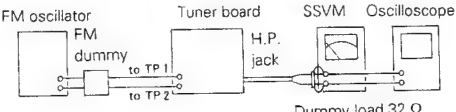


Fig. 8-3

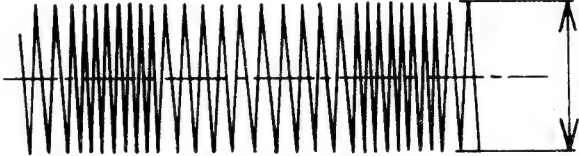
■ Check and adjustment of tuner section

Item	Conditions	Check/adjustment procedure	Standard value	Adjusting point
AM IF check	<ul style="list-style-type: none"><li>• Band select: AM</li><li>• Reception frequency: Possibly higher with-out signal reception</li><li>• Volume : Minimum</li><li>• Input through : TP3 (Hot)</li><li>• Output through : TP6 (Hot) TP7 (GND)</li></ul>	<p>AM IF usually need not to adjust except after repair or so.</p> <div><p>Fig. 8-4</p><p>Adjust the waveform so that its lowest/highest point appears around 450 kHz and forms symmetrically as shown in Fig. 8-5.</p></div>	<div><p>Fig. 8-5</p></div>	T2



Item	Conditions	Check/adjustment procedure	Standard value	Adjusting point
FM IF check	<ul style="list-style-type: none"> <li>Band select: FM</li> <li>Reception frequency: Possibly higher without signal reception</li> <li>Volume : Minimum</li> <li>Input through : TP5 (Hot)</li> <li>Output through : TP6 (Hot) TP7 (GND)</li> </ul>	<p>FM IF usually need not to adjust except after repair or so.</p>  <p><b>Fig. 8-6</b></p> <ol style="list-style-type: none"> <li>1. Remove CF3 to obtain single peak waveform (as shown in Fig. 8-8) for the S-curve (Fig. 8-7) waveform.</li> <li>2. Turn T1 so that the highest/lowest point of the waveform is observed around 10.7 MHz and it forms symmetrically.</li> <li>3. Reset CF3 and confirm that the waveform returns to the original.</li> </ol>	 <p><b>Fig. 8-7</b></p>  <p><b>Fig. 8-8</b></p>	T1
AM tracking check	<ul style="list-style-type: none"> <li>Band select: AM</li> <li>Input through : Standard loop antenna</li> <li>Output through : Headphone jack</li> </ul>	 <p><b>Fig. 8-9</b></p> <ol style="list-style-type: none"> <li>1. With 603 kHz signal from AM oscillator being received by the set, adjust L3 to maximize the headphone output.</li> <li>2. With 1404 kHz signal being received, adjust TC2 to maximize the headphone output.</li> <li>3. Repeat the above steps 1 and 2 to obtain the maximum output for the both.</li> </ol>	Output level: Maximum	L3 TC2 L3, TC2
FM tracking adjustment	<ul style="list-style-type: none"> <li>Band select: FM</li> <li>Input through : TP1 (Hot) TP2 (GND) 75 Ω unbalanced</li> <li>Output through : Headphone jack</li> </ul>	 <p><b>Fig. 8-10</b></p> <p>With 88 MHz signal being received by the set, adjust L2 to maximize the headphone output.</p>	Output level: Maximum	L2
LW tracking (RC-B1 E)	<ul style="list-style-type: none"> <li>Input through : Standard loop antenna</li> </ul>	<ol style="list-style-type: none"> <li>1. With 144 kHz signal from LW oscillator being received by set. Adjust L6 to maximize the headphone output.</li> <li>2. Adjust L6 to obtain <math>1.1 \pm 0.02</math> V at TP9.</li> <li>3. With 144 kHz signal from LW being received by set. Adjust L5 to maximize the headphone output.</li> <li>4. With 288 kHz signal from LW being received by set. Adjust TC3 to maximize the headphone output.</li> <li>5. Repeat the step 3 and 4, adjust for no further improvement.</li> </ol>	Output level: Maximum $1.1 \pm 0.02$ V	L6 L5 TC-3

■ Adjustment of CD player section

Item	Required articles	Check/adjustment procedure	Adjusting point
Tracking offset adjustment	<ul style="list-style-type: none"><li>• Normal disc</li><li>• Oscilloscope</li></ul>	<ol style="list-style-type: none"><li>1. Connect an oscilloscope between TP502 (VREF) and TP503 (TE).</li><li>2. Shortcircuit between pin②and pin⑤of FW501, and supply 8 V to pin③</li><li>3. Play back a normal disc.</li><li>4. Shortcircuit between TP504 and TP502.</li><li>5. Adjust VR501 so that DC level of tracking error signal becomes zero (observed by oscilloscope).</li></ol> <div><p>Tracking offset waveform</p><p>Note: 1) Adjust VR501 so that the waveform is vertically symmetric with respect to the zero level. 2) Input to the oscilloscope should be DC coupling.</p></div>	VR501

■ Location of adjusting parts

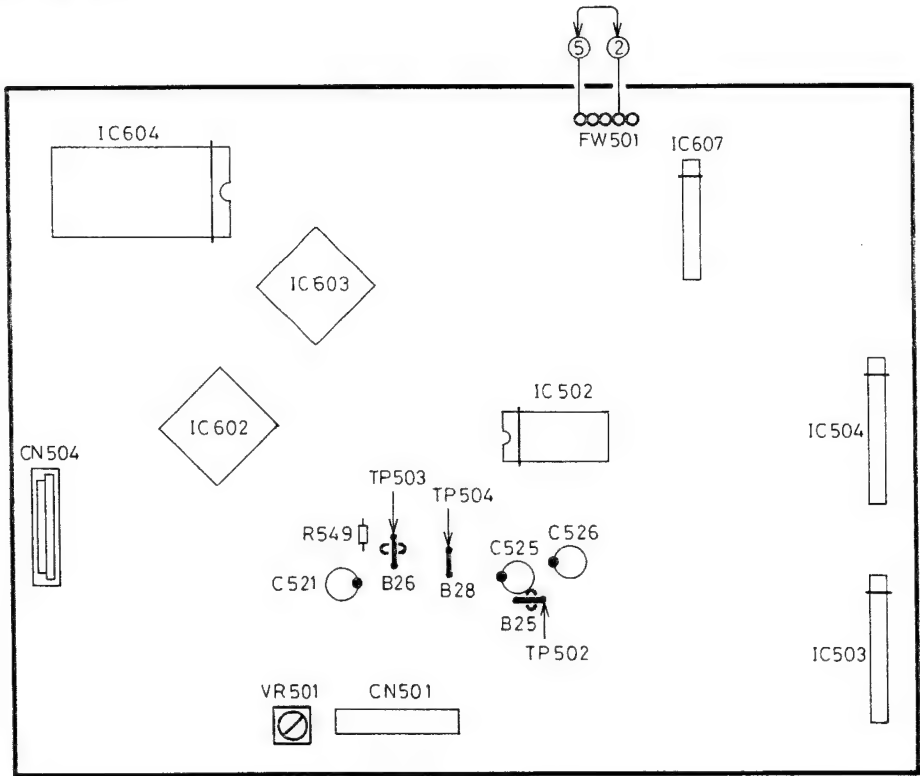
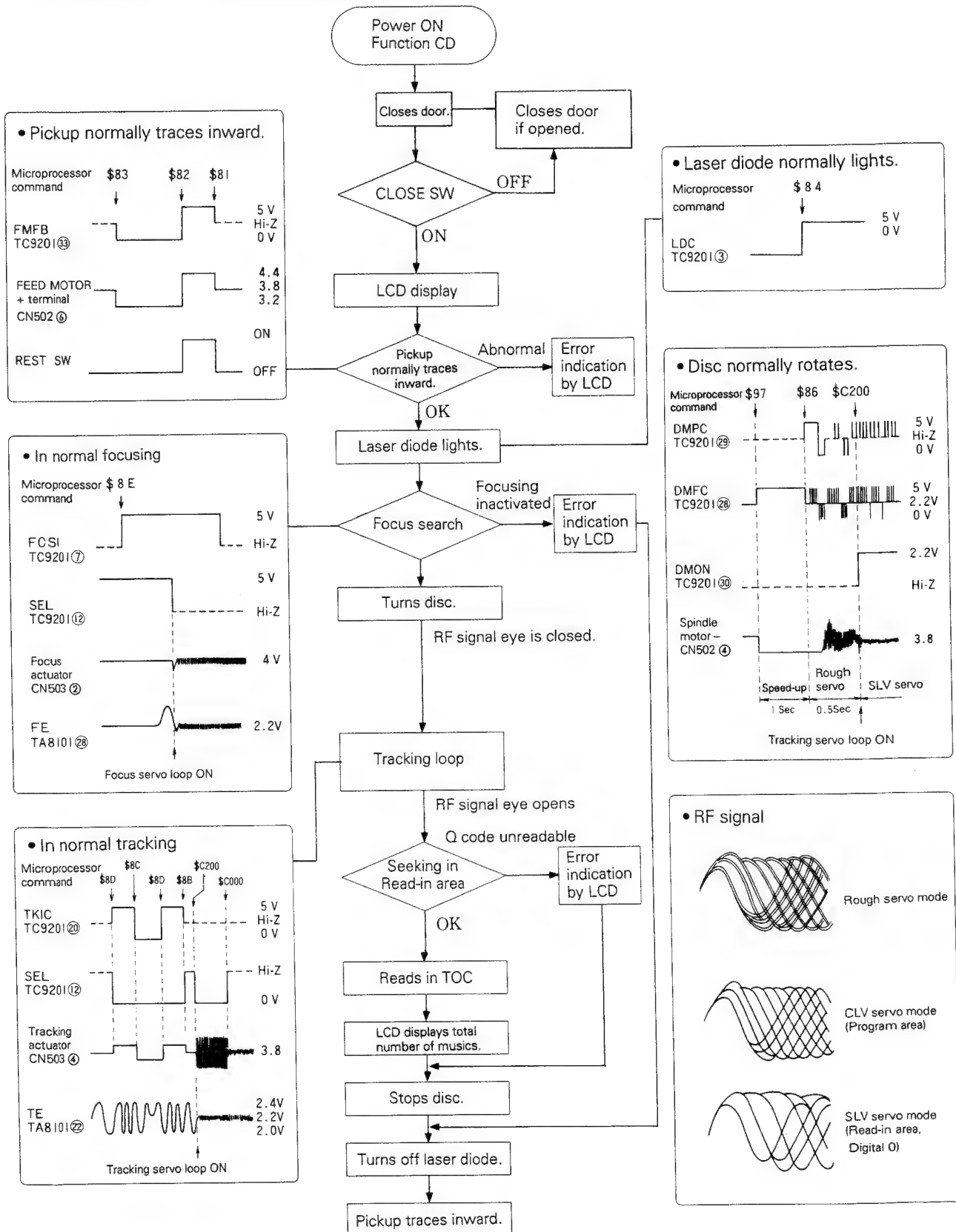


Fig. 8-11



## ■ Flowchart of TOC (Table of Contents) Reading

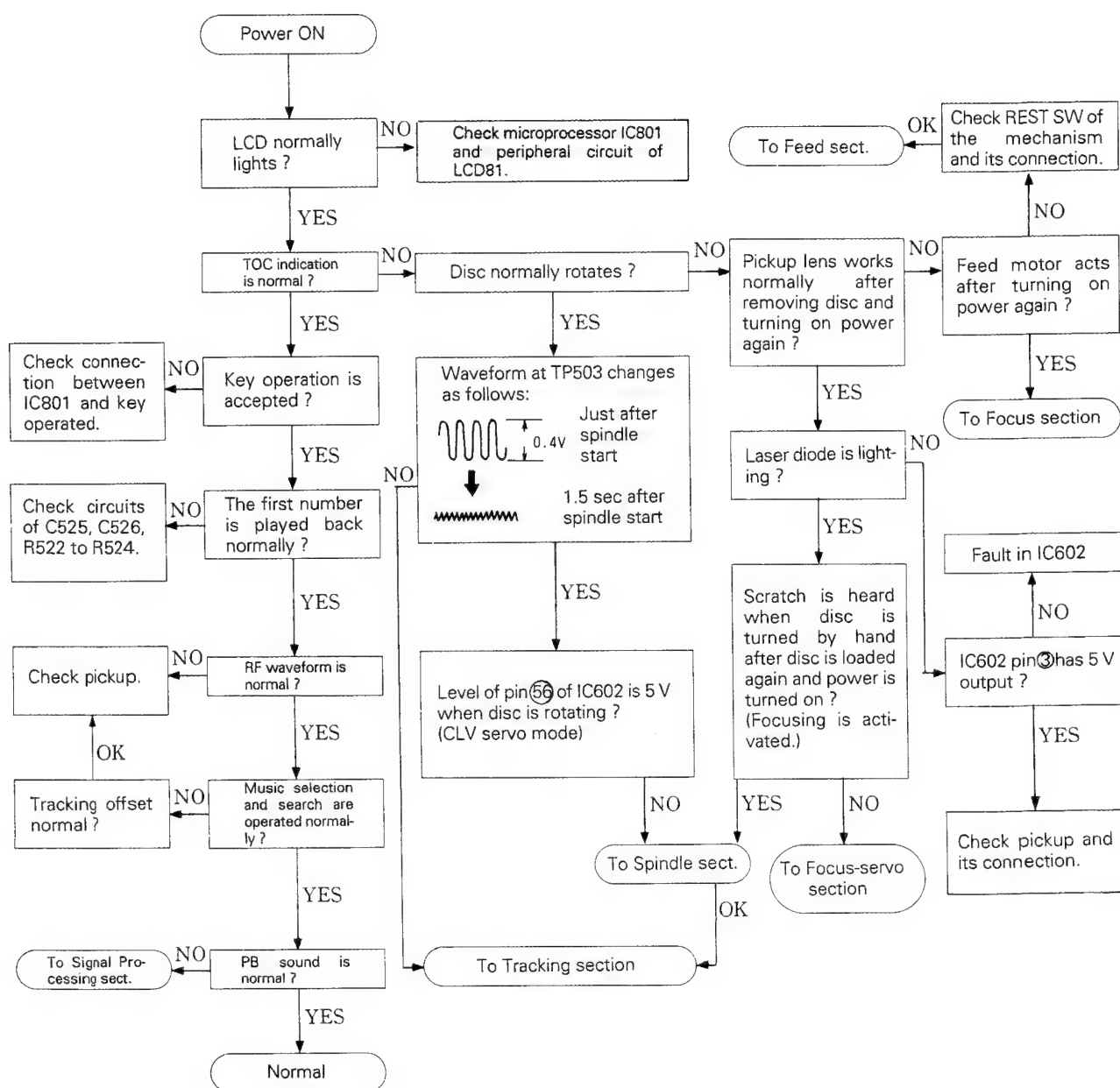


TOC : Table of Contents

\$ mark : Indicates hexadecimal digits in two figures.

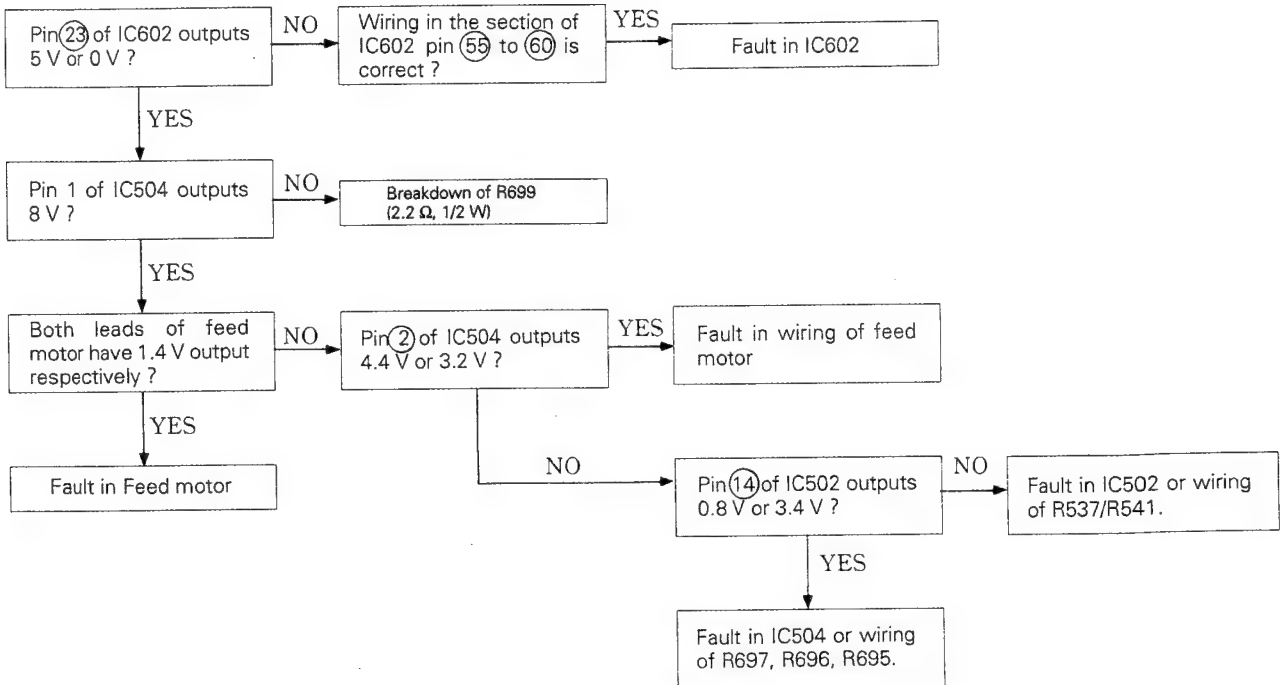
Example: \$32 interprets 00100011 in binary notation.

# ■ Comprehensive troubleshooting

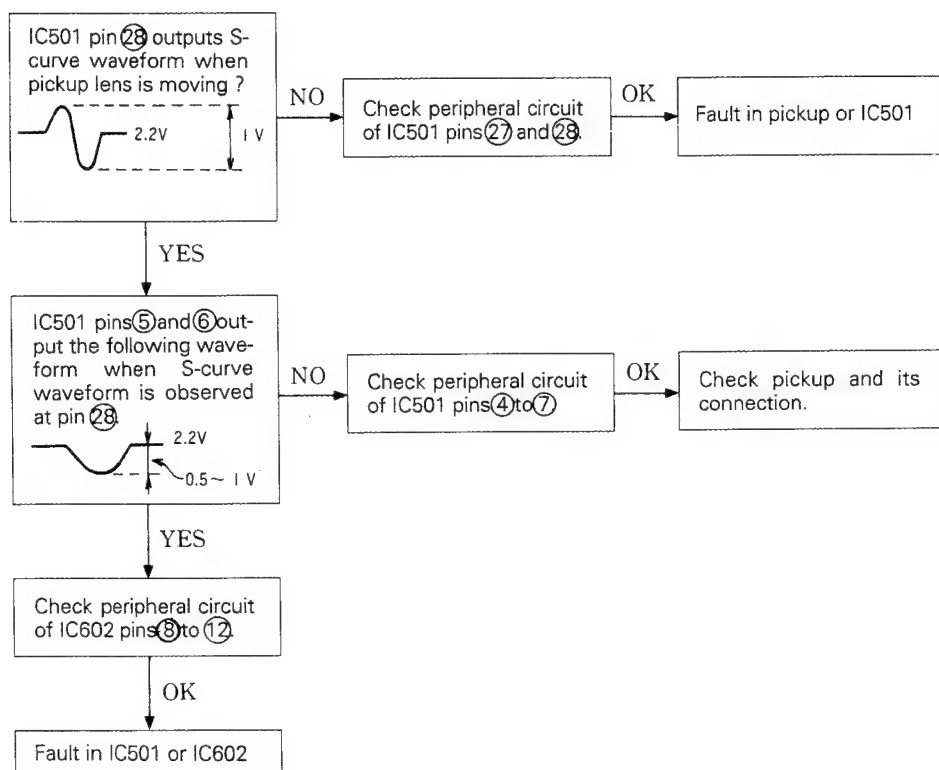


RF : Radio Frequency (High frequency)  
 CLV : Constant Linear Velocity  
 CPU : Central Processing Unit

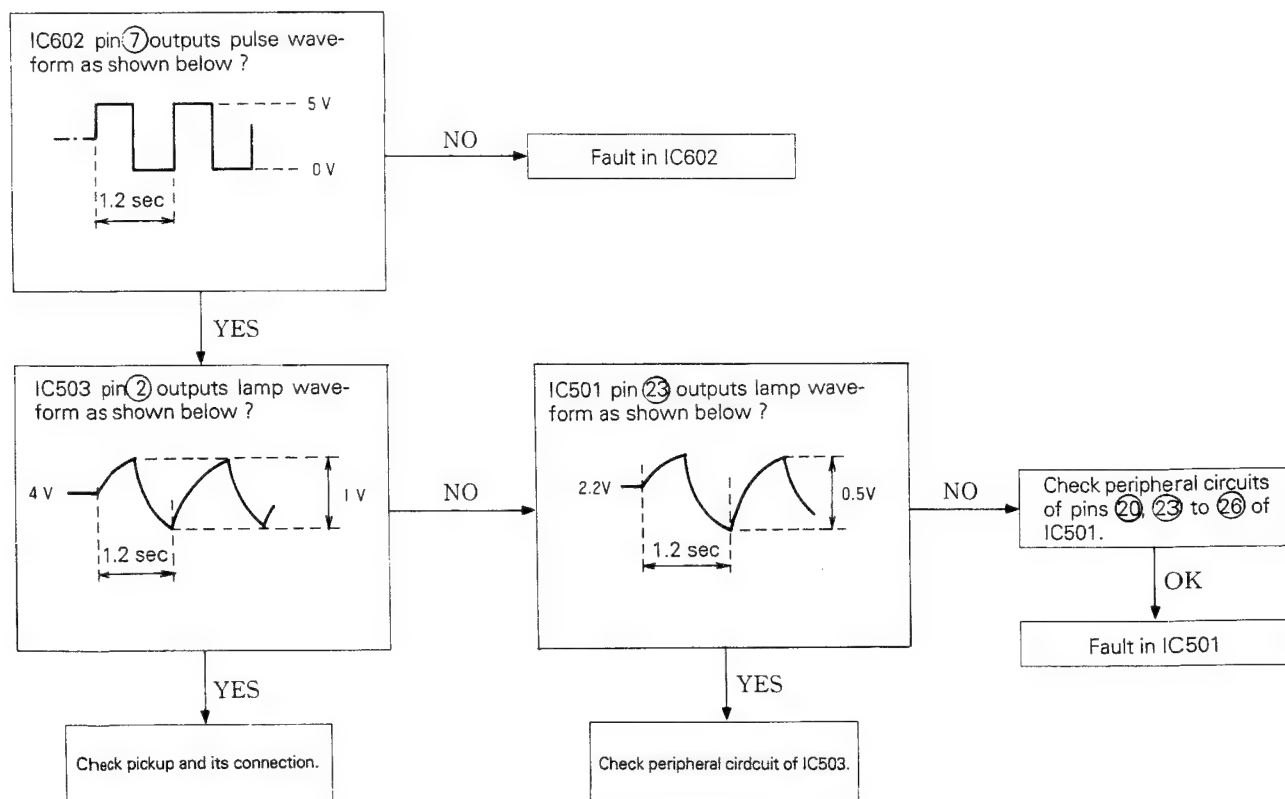
### ■ Troubleshooting of feed section



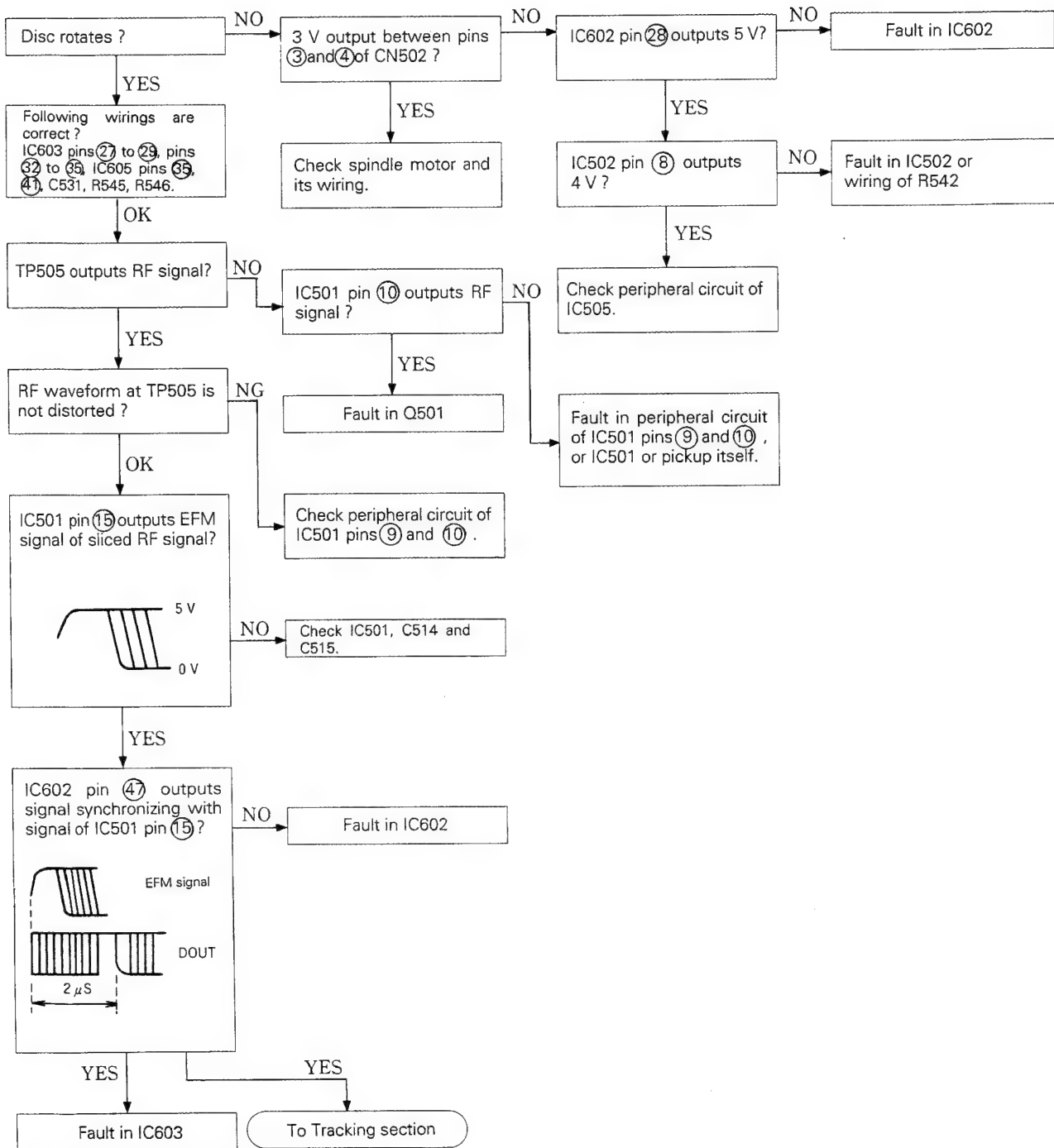
## ■ Troubleshooting of focus servo section



## ■ Troubleshooting of focus driving section

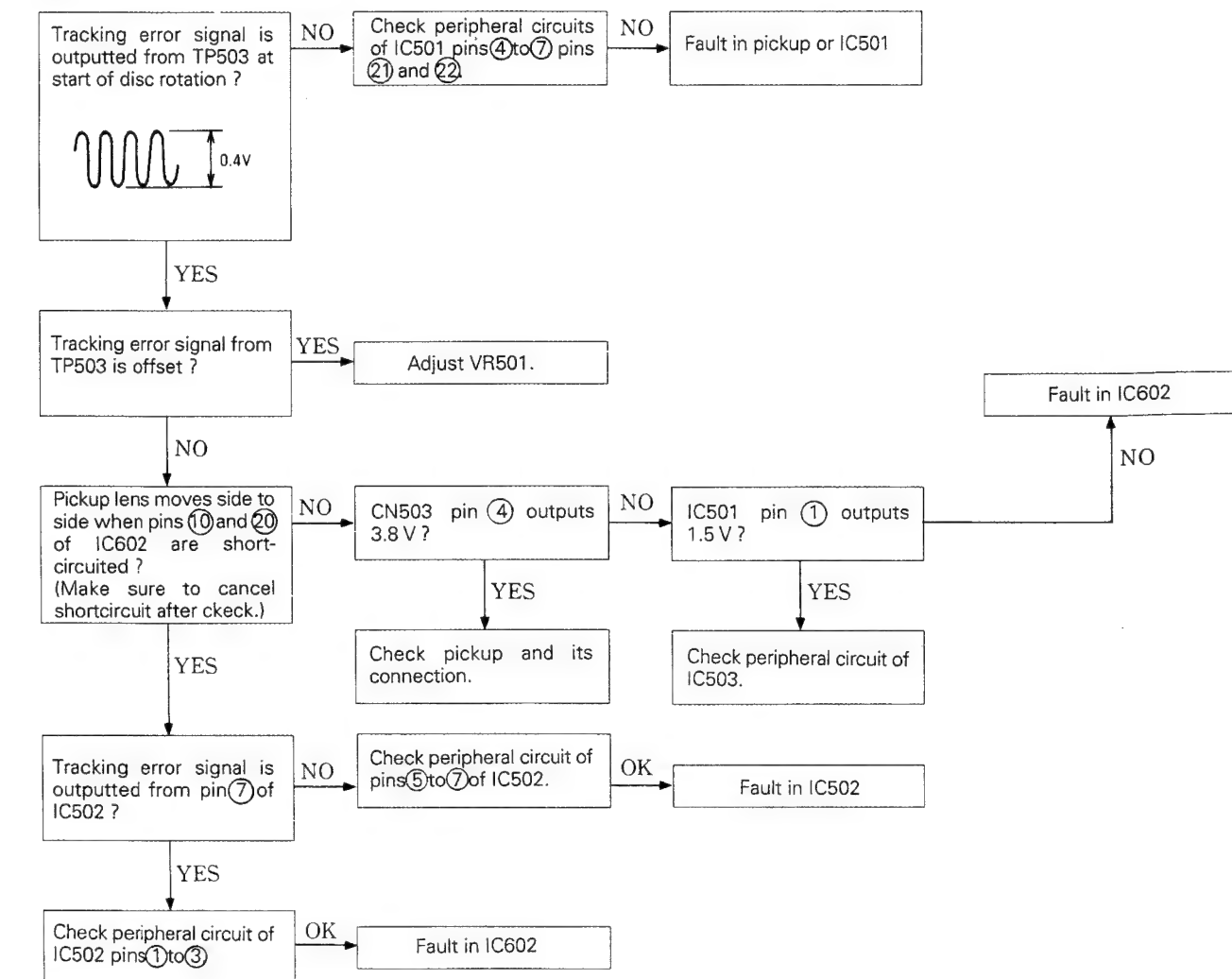


## ■ Troubleshooting of spindle section

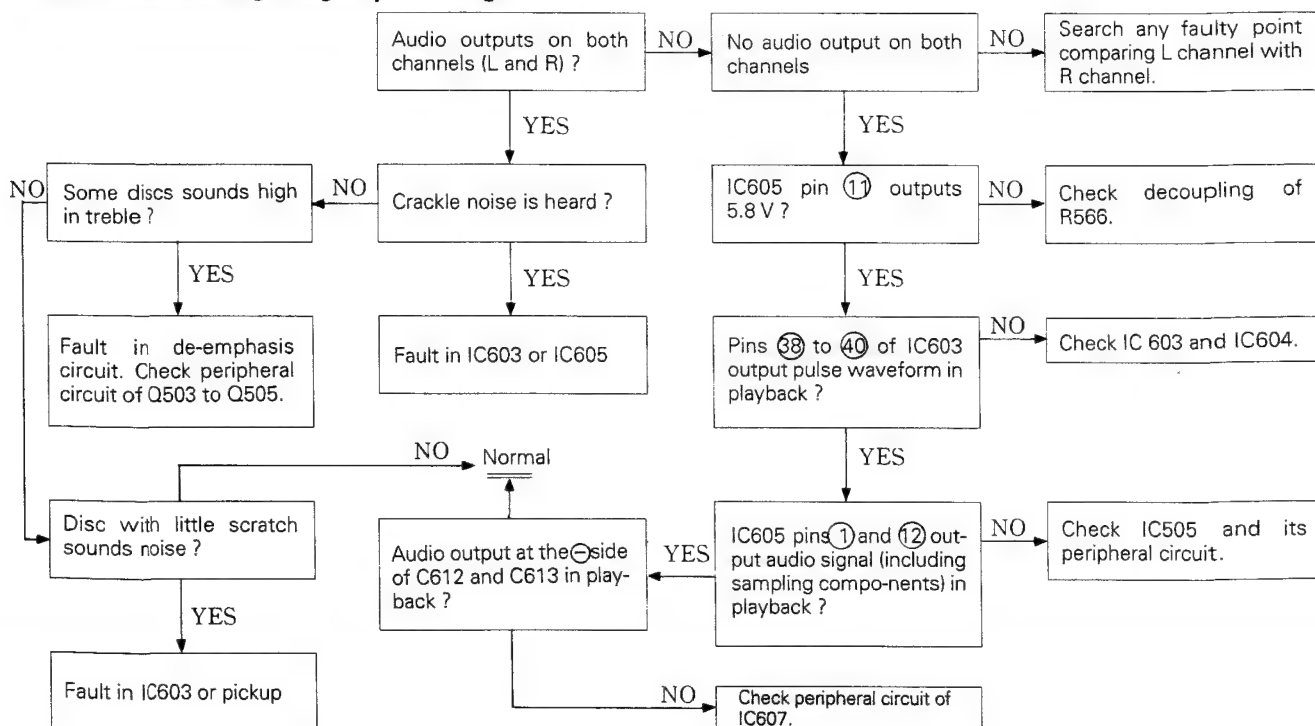


EFM : Eight to Fourteen Modulation

### ■ Troubleshooting of tracking section

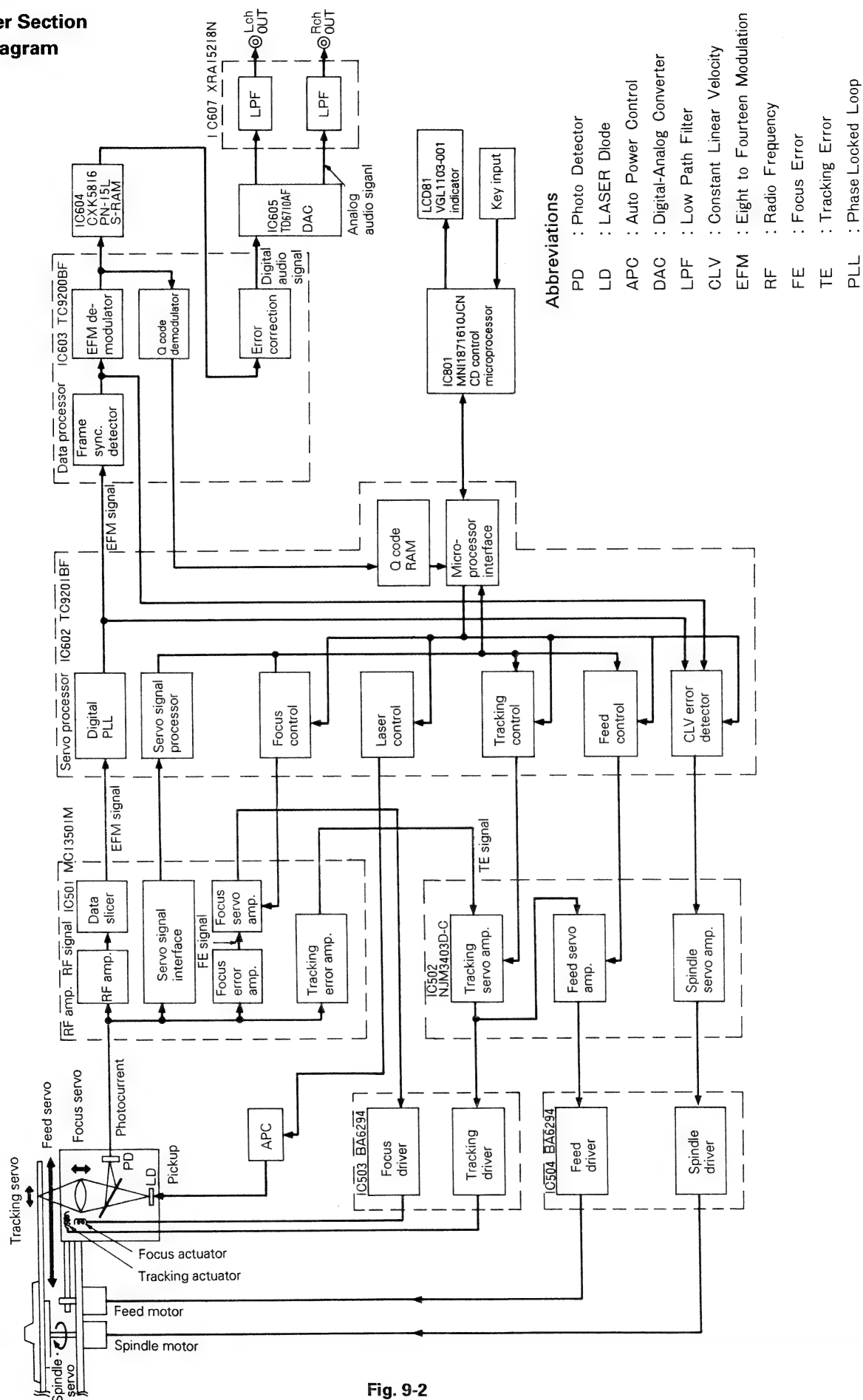


### ■ Troubleshooting of signal processing





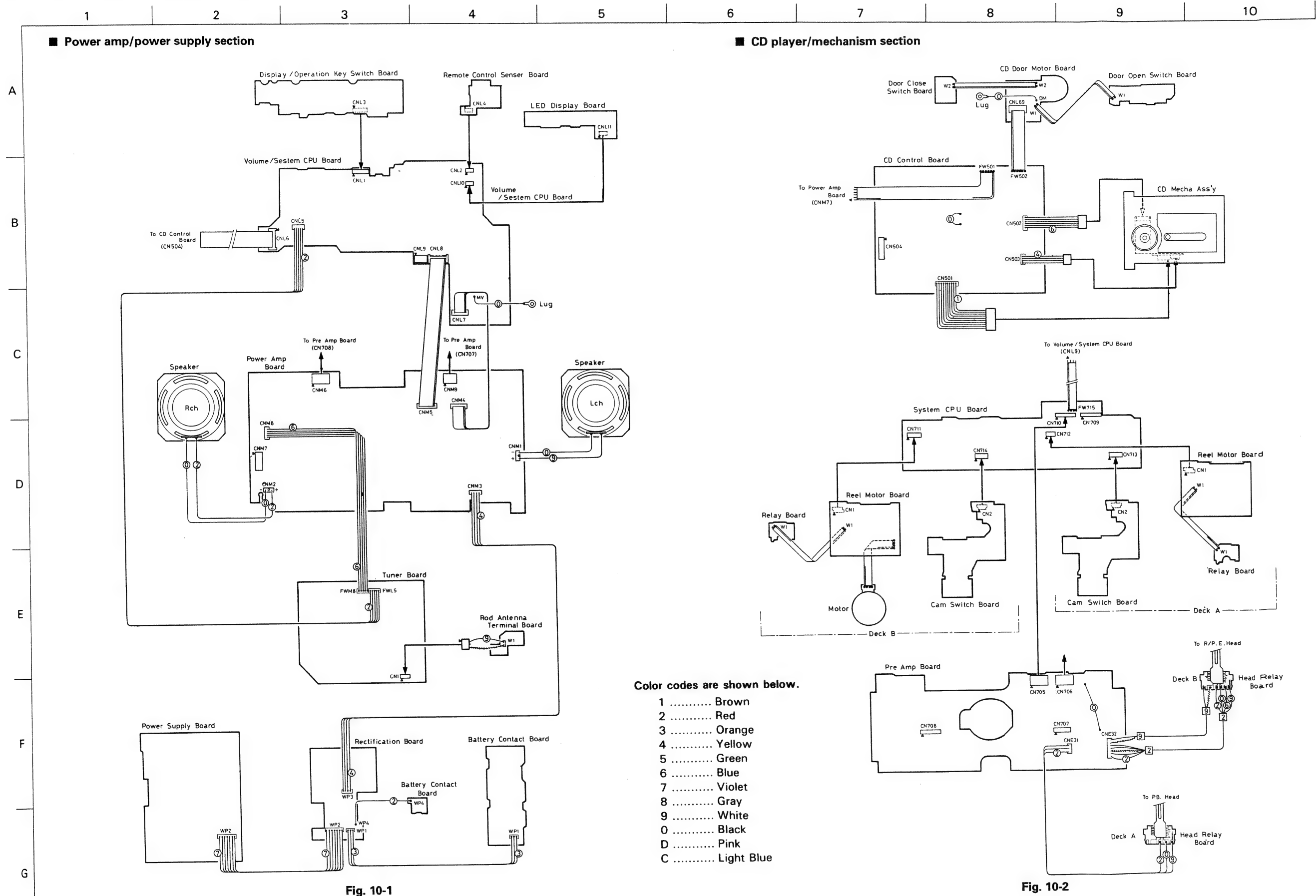
### ■ CD Player Section Block Diagram



**Fig. 9-2**



# 10 Wiring Connection



# 11 Standard Schematic Diagram and Location of P.C. Board Parts

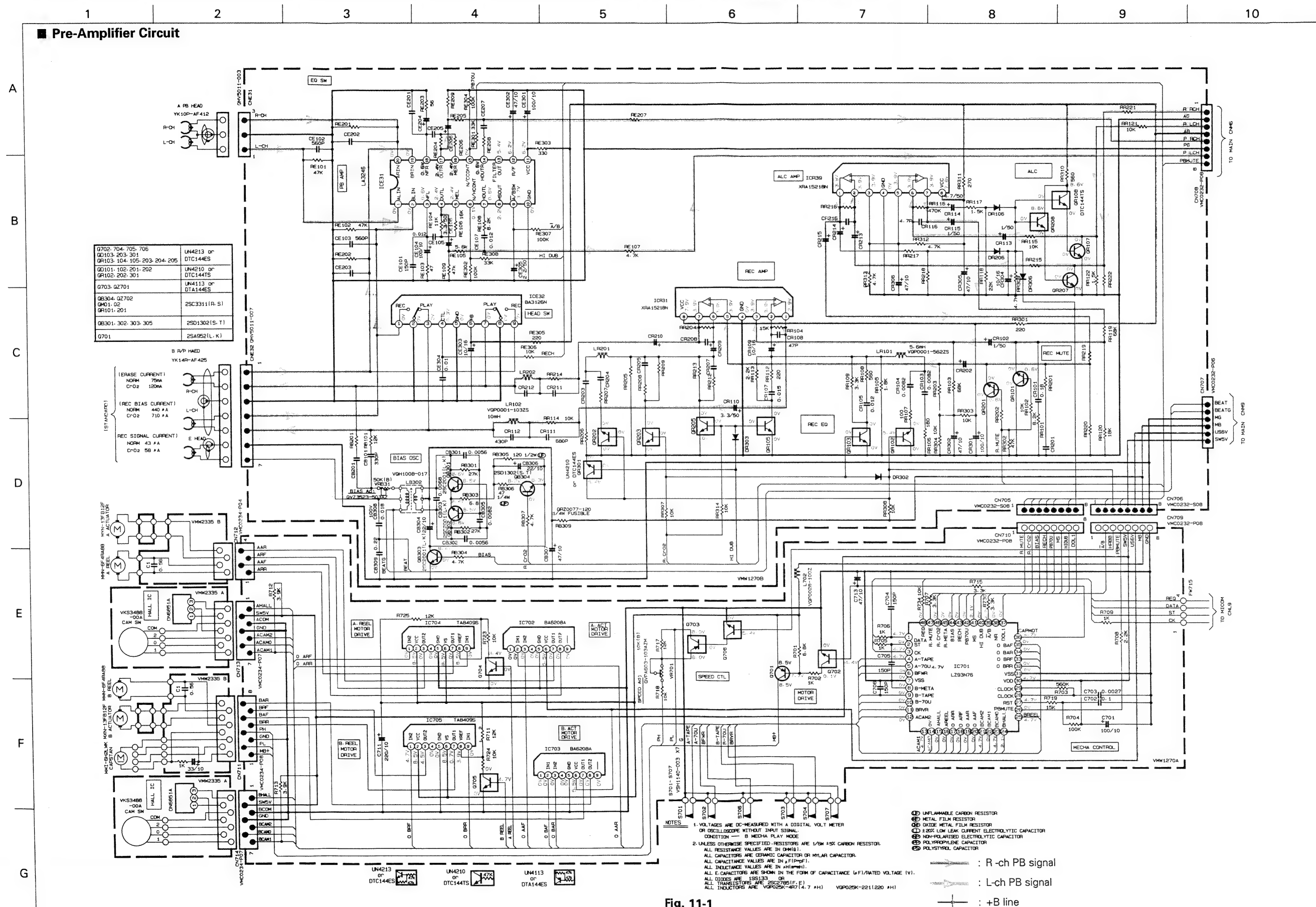


Fig. 11-1



■ Pre-Amplifier P. C. Board

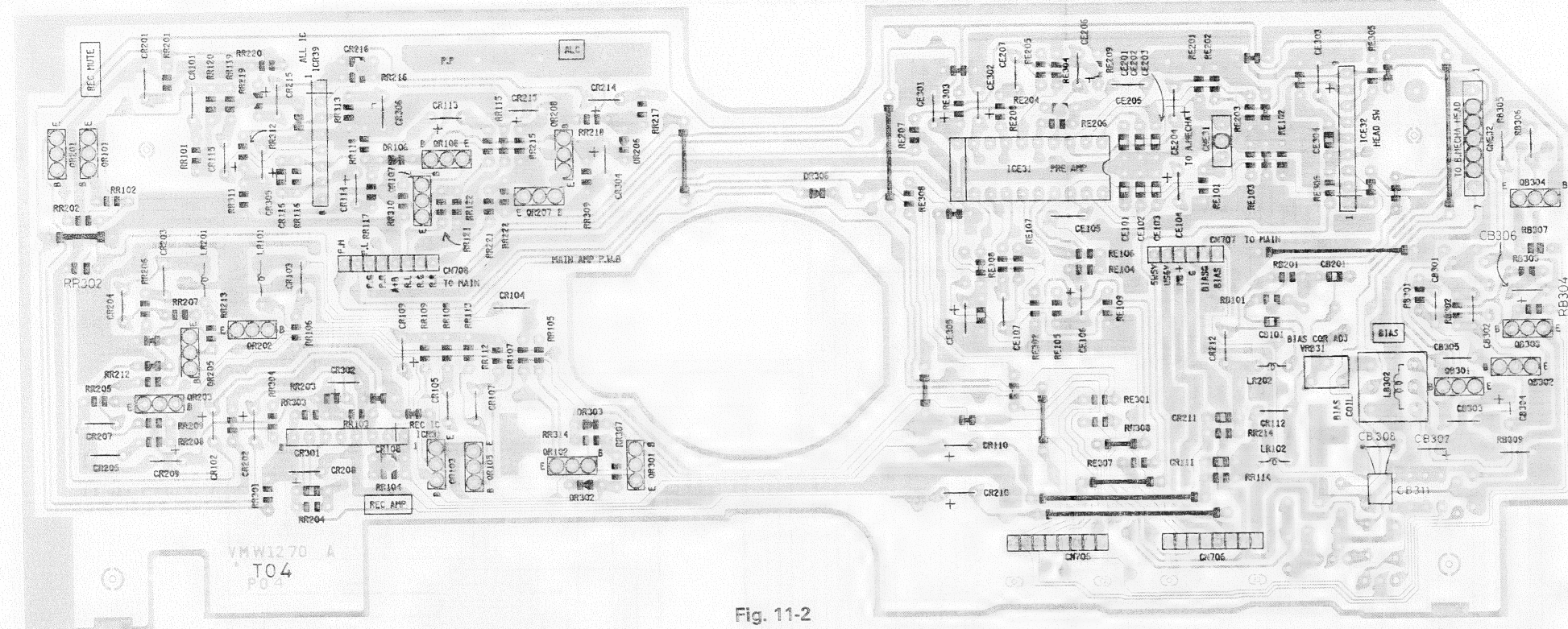


Fig. 11-2

■ Leaf Switch P. C. Board

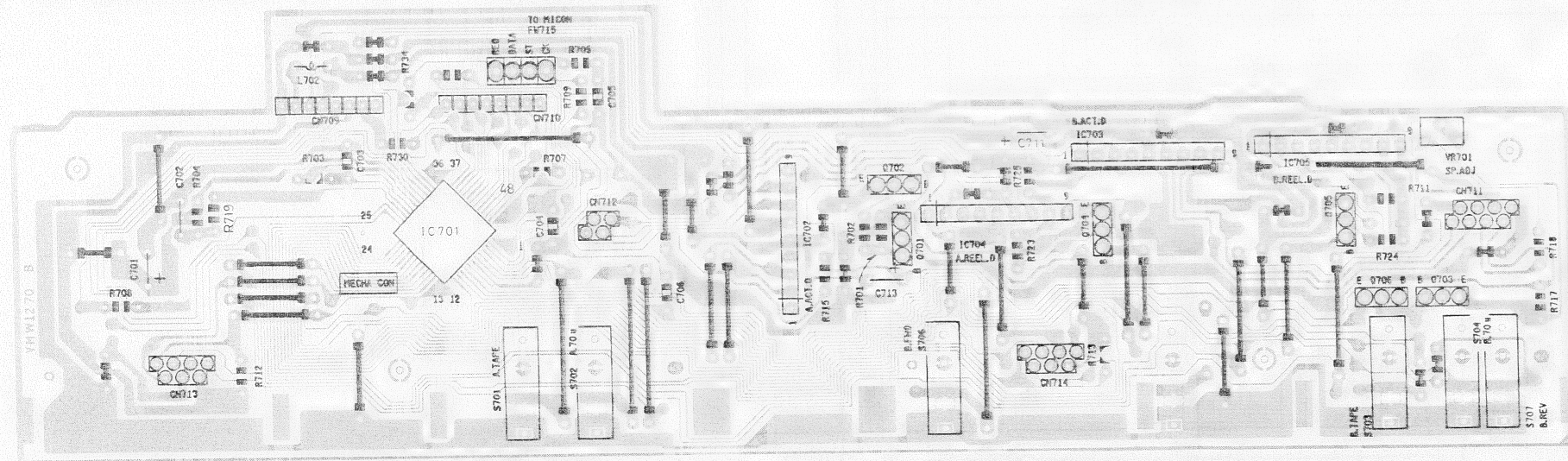


Fig. 11-3

■ Head Relay P. C. Board

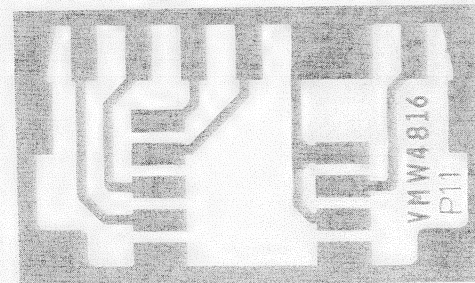


Fig. 11-6

■ Head Base Drive Motor P. C. Board

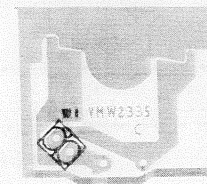


Fig. 11-7

■ Real Motor P. C. Board

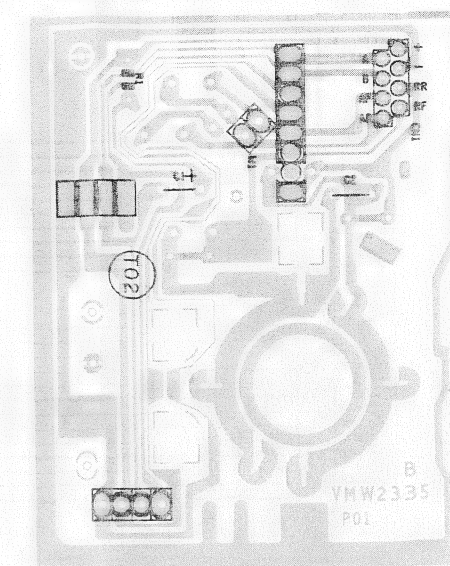


Fig. 11-4

■ Cam Switch P. C. Board

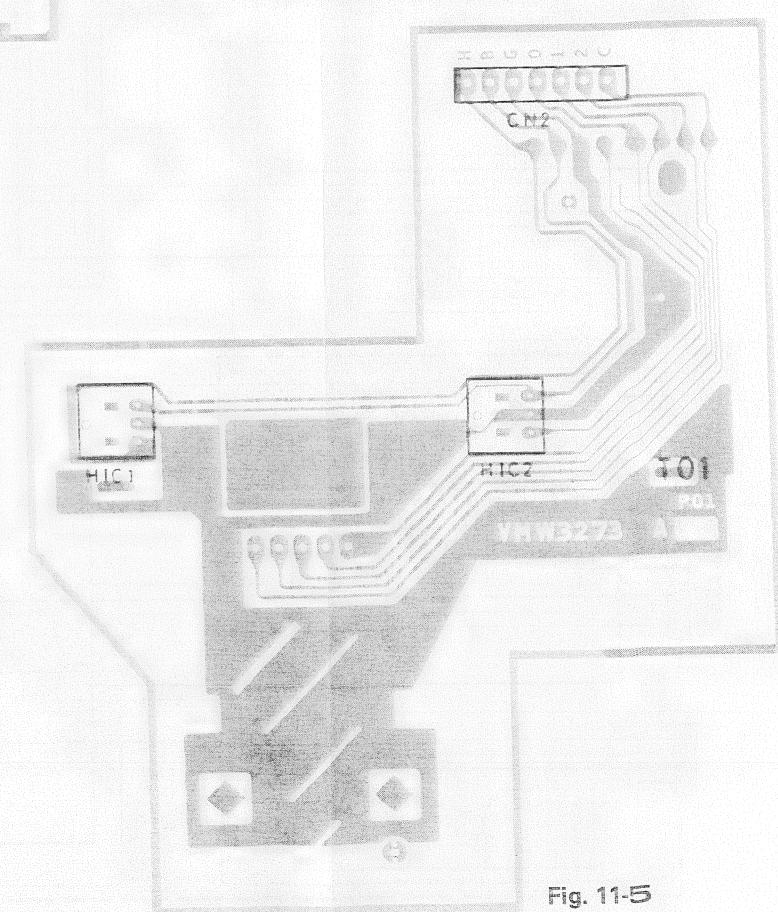


Fig. 11-5



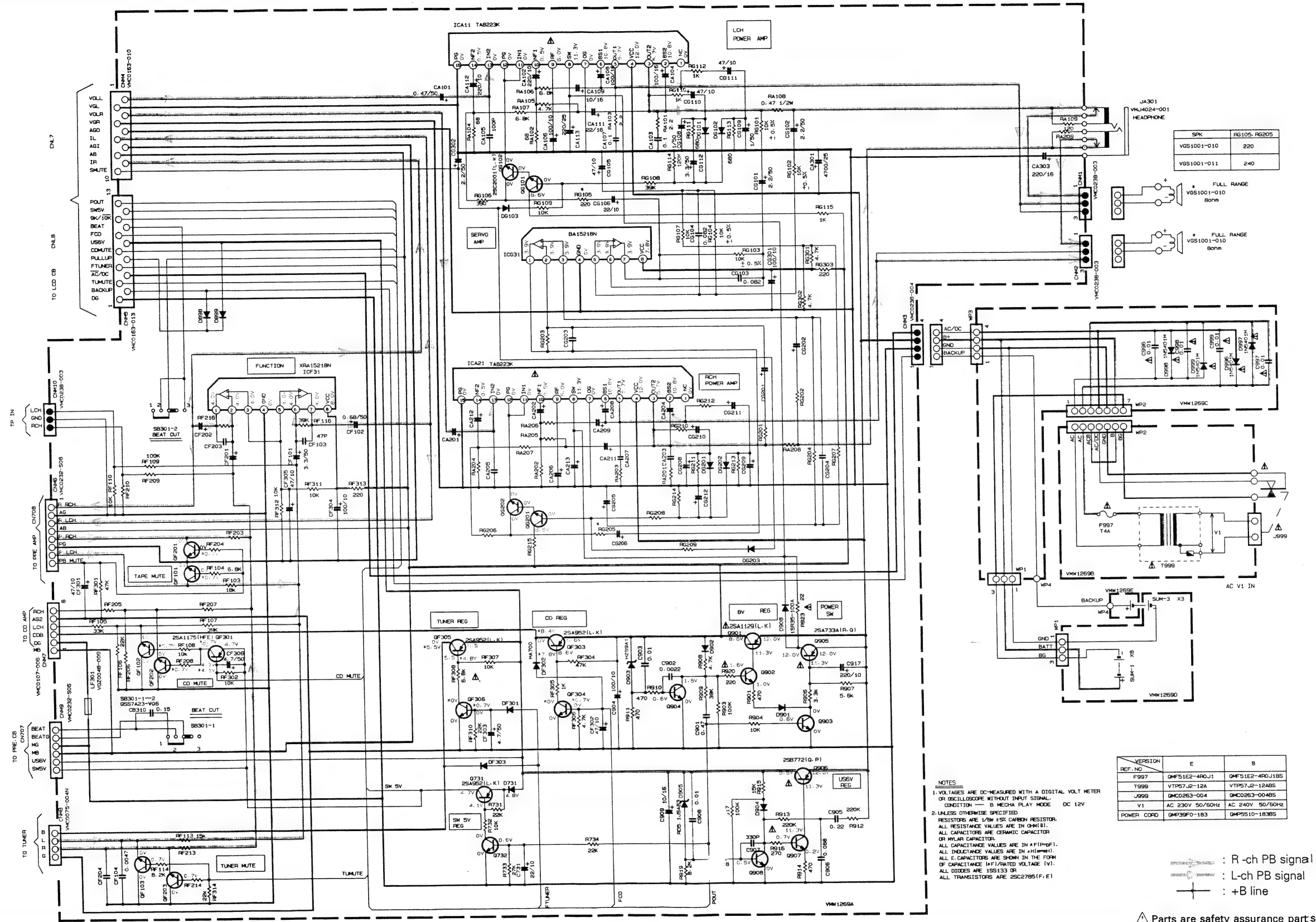
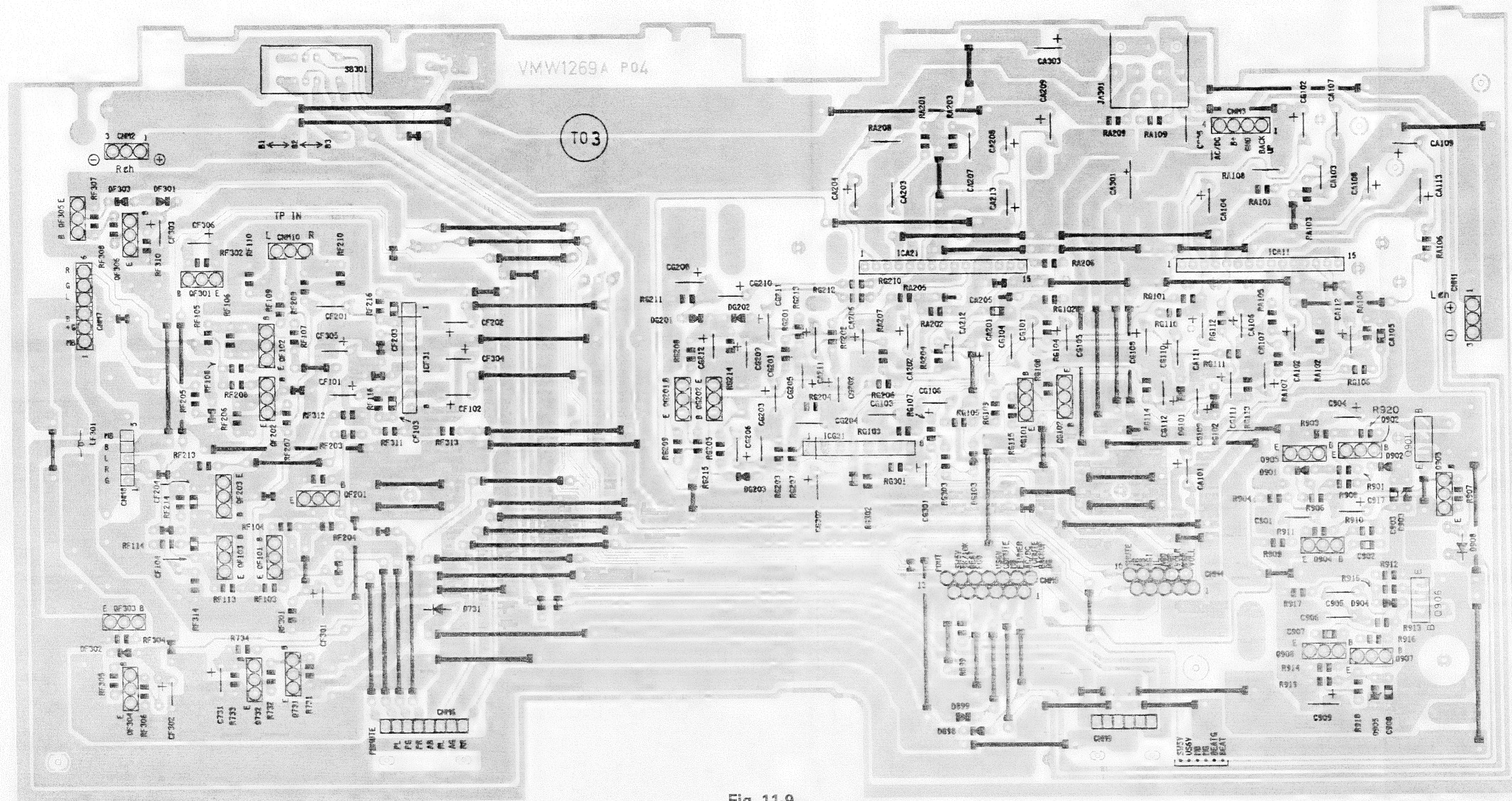
**Function/Power Amplifier/Power Supply Circuit : Drawing No. VDH5158-002AV**


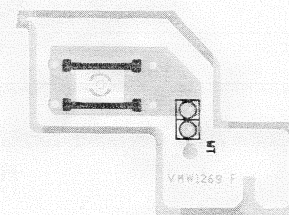
Fig. 11-8



■ Function/Power Amplifier P.C. Board



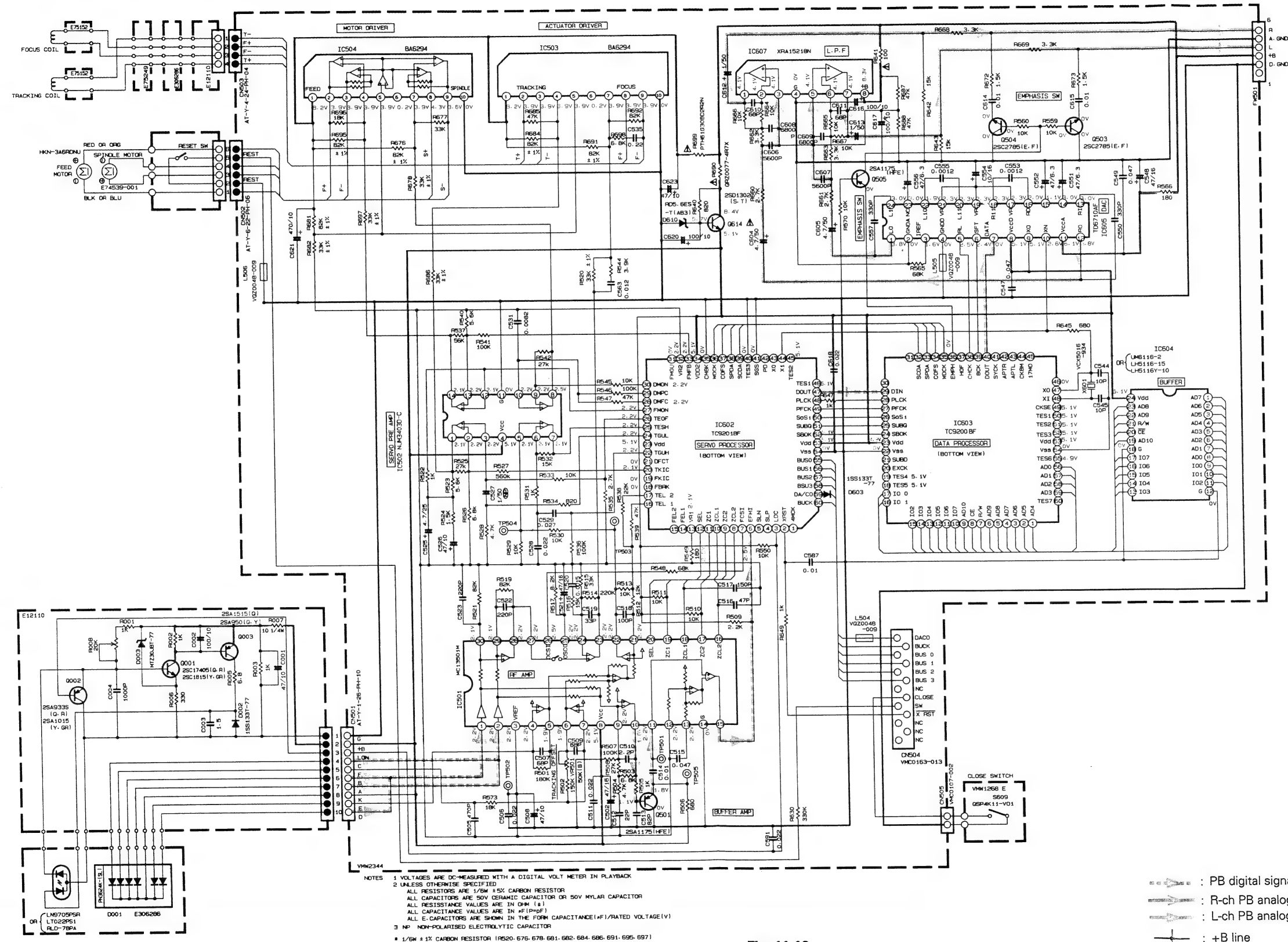
■ Rod Antenna Terminal P. C. Board







■ CD Amplifier Circuit : Drawing No. VDH5158-002CV





■ CD Door Open Switch P. C. Board

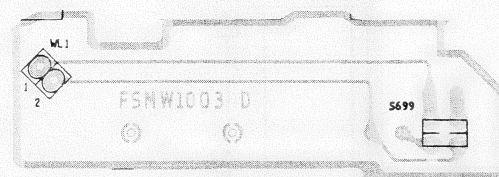


Fig. 11-17

■ CD Close Switch P. C. Board

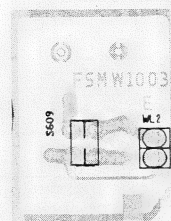


Fig. 11-18

■ Display/System CPU P. C. Board

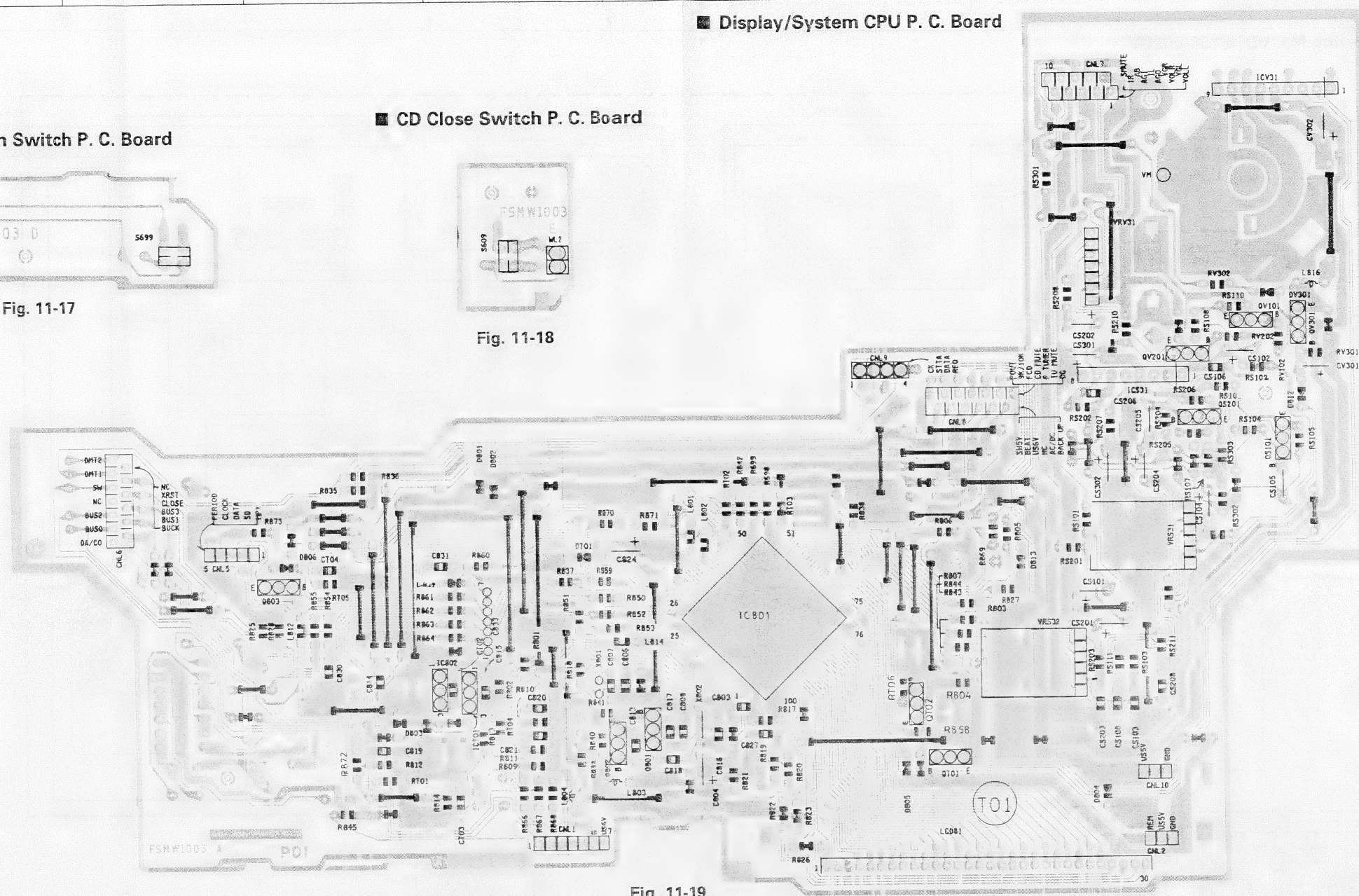


Fig. 11-19

■ Remocon Sensor P. C. Board

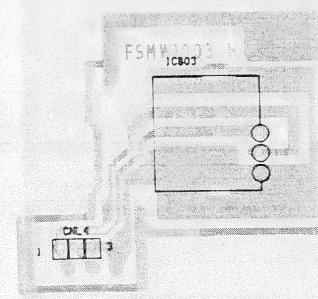


Fig. 11-21

■ CD Door Drive Motor P. C. Board

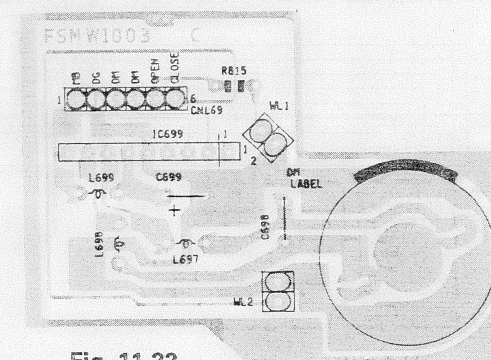


Fig. 11-22

■ CD Operation Switch P. C. Board

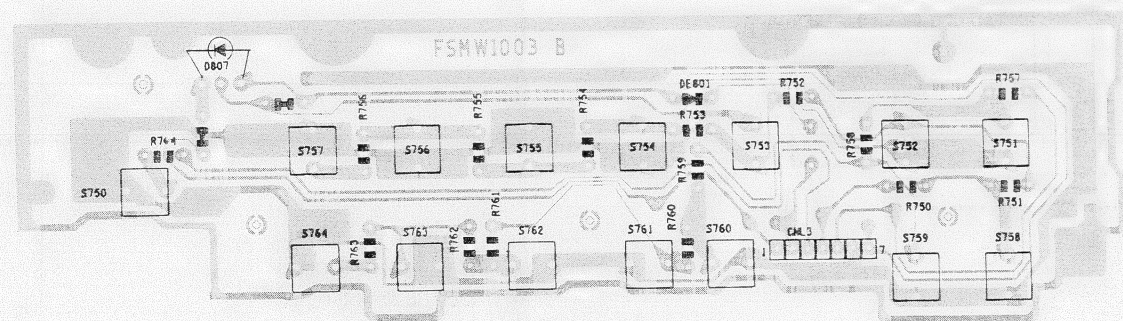
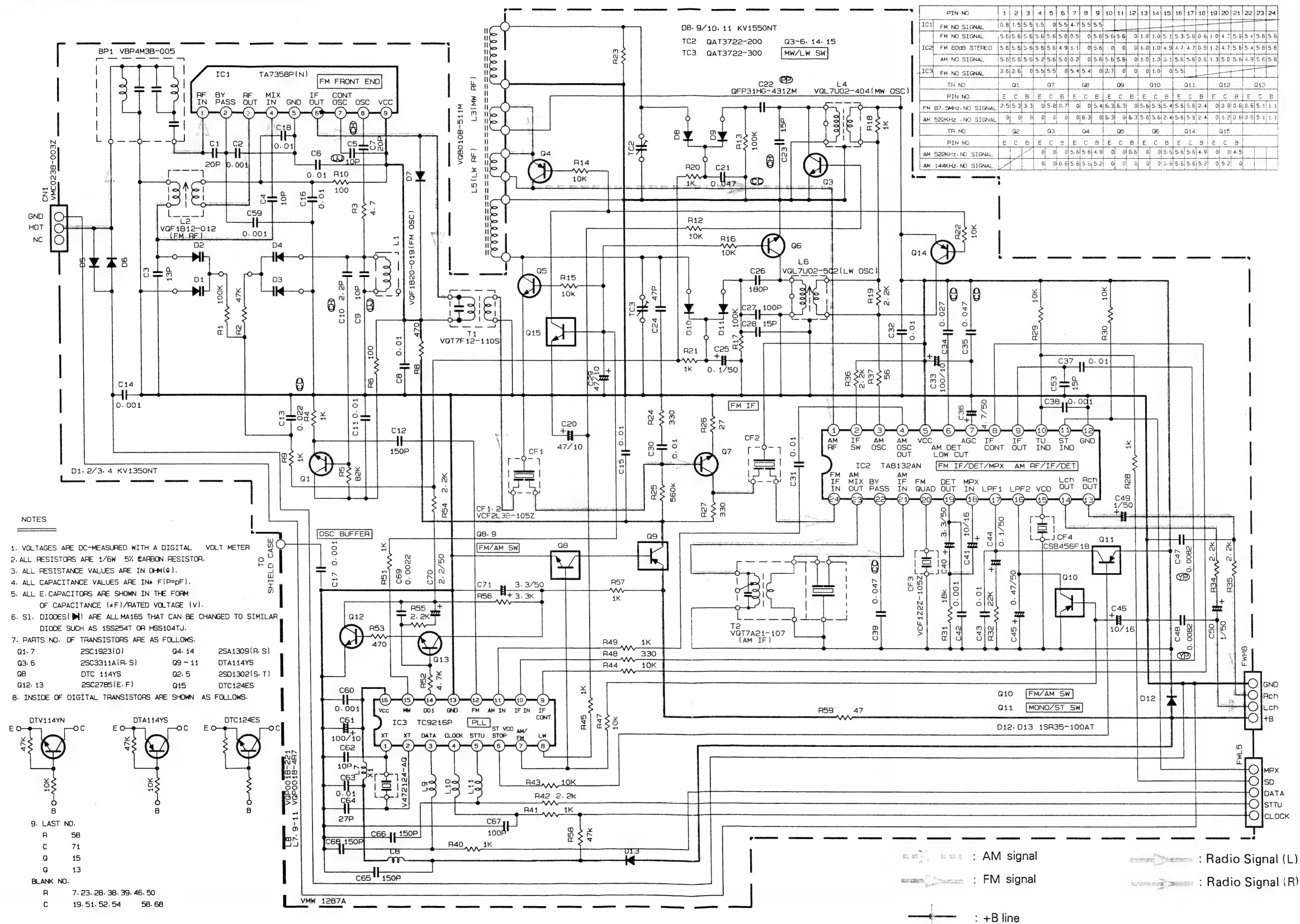


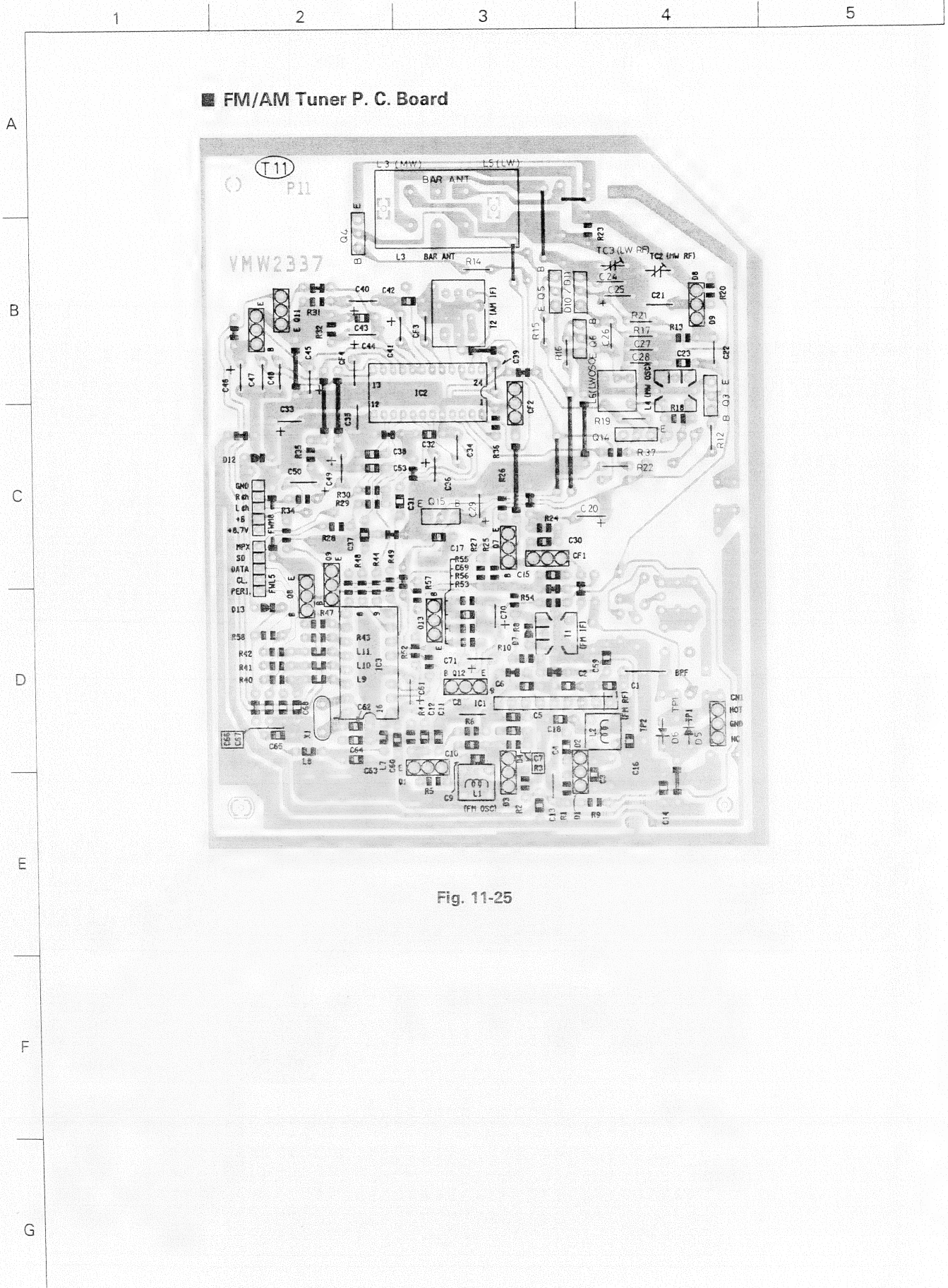
Fig. 11-20



(No. 1863) 65

## ■ FM/AM Tuner Circuit : Drawing No. VDH5158-003TW





12 Electrical Parts List

Parts are safety assurance parts.  
When replacing those parts, make sure to use the specified one.

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CR115	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
	CR116	QCSB1HK-4R7Y	E CAPACITOR	4.7PF 10% 50V	
	CR201	QFV41HJ-184	TF CAPACITOR	.18MF 5% 50V	
	CR202	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
	CR203	QFLA1HJ-822ZM	M CAPACITOR	8200PF 5% 50V	
	CR204	QFLA1HJ-822ZM	M CAPACITOR	8200PF 5% 50V	
	CR205	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
	CR206	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
	CR207	QFLC1HJ-153ZM	M CAPACITOR	.015MF 5% 50V	
	CR208	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
	CR209	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
	CR210	QER61HM-335ZN	E CAP	3.3MF 20% 50V	
	CR211	QCSB1HK-681Y	C CAPACITOR	680PF 10% 50V	
	CR212	QCS31HJ-431Z	C CAPACITOR	430PF 5% 50V	
	CR213	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
	CR214	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V	
	CR215	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
	CR216	QCSB1HK-4R7Y	C CAPACITOR	4.7PF 10% 50V	
	CR301	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
	CR302	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	CR303	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
	CR306	QER61AM-476ZM	E CAPACITOR	47MF 20% 10V	
	DR106	1S5133	DIODE		
	DR206	1S5133	DIODE		
	DR303	1S5133	DIODE		
	DR306	1S5133	DIODE		
	IC331	LA3246	IC		
	IC332	BA3126N	IC		
	IC333	XRA15218N	IC		
	IC339	BA15218N	IC		
	IC701	L793N76	IC		
	IC702	BA6208A	IC		
	IC703	BA6208A	IC		
	IC704	TAB409S	IC		
	IC705	TAB409S	IC		
	L 702	VQP0028-100Z	INDUCTOR		
	LB302	VGH1008-017	OSC COIL (BIAS)		
	LR101	VGP0001-5622S	INDUCTOR		
	LR102	VGP0001-103S	INDUCTOR		
	LR201	VGP0001-5622S	INDUCTOR		
	LR202	VGP0001-103S	INDUCTOR		
	Q 701	2SA952(L,K)	TRANSISTOR		
	Q 702	DTC144ES	TRANSISTOR		
	Q 703	DTA144ES	TRANSISTOR		
	Q 704	DTC144ES	TRANSISTOR		
	Q 705	DTC144ES	TRANSISTOR		
	Q 706	DTC144ES	TRANSISTOR		
	QB301	2SC2001(L,K)	TRANSISTOR		
	QB302	2SC2001(L,K)	TRANSISTOR		
	QB303	2SC2001(L,K)	TRANSISTOR		
	QB304	2SD1302(S,T)	TRANSISTOR		
	QR101	2SC2785(HFE)	TRANSISTOR		
	QR102	DTIC144TS	TR-I.M		
	QR103	DTIC144ES	TRANSISTOR		
	QR105	DTIC144WSTP	TR-I.M *****		
	QR107	2SC2785(HFE)	TRANSISTOR		
	QR108	DTIC144TS	TR-I.M		
	QR201	2SC2785(HFE)	TRANSISTOR		
	QR202	DTIC144TS	TR-I.M		
	QR203	DTIC144ES	TRANSISTOR		
	QR205	DTIC144WSTP	TR-I.M *****		
	QR207	2SC2785(HFE)	TRANSISTOR		
	QR208	DTIC144TS	TR-I.M		
	QR301	DTIC144TS	TR-I.M		

כרכר  
VBE 947K

Pre-Amplifier/Leaf Switch P. C. Board

BLOCK NO. 0 1

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 2	QFV11HJ-566ZN	TF CAPACITOR	.56MF 5% 50V	
	C 701	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 702	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 703	QCSB1CM-272Y	C CAPACITOR	2700PF 20% 16V	
	C 704	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 705	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 706	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 707	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 711	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V	
	C 713	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
	CB101	QCSB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	CB301	QCSB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	CB301	QFN41HJ-562	M CAPACITOR	5600PF 5% 50V	
	CB302	QFN41HJ-562	M CAPACITOR	5600PF 5% 50V	
	CB303	QFN41HJ-682	M CAPACITOR	6800PF 5% 50V	
	CB304	QETC1AM-226ZN	E CAPACITOR	22MF 20% 10V	
	CB305	QFN81HJ-822	M CAPACITOR	8200PF 5% 50V	
	CB306	QETC1AM-226ZN	E CAPACITOR	22MF 20% 10V	
	CB307	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
	CB308	QFV41HJ-183	TF CAPACITOR	.018MF 5% 50V	
	CB309	QFV41HJ-823	TF CAPACITOR	.082MF 5% 50V	
	CE101	QFN41HJ-222	M CAPACITOR	2200PF 5% 50V	
	CE102	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	CE103	QCSB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	CE104	QCSB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	CE105	QFLC1HJ-123ZM	M CAPACITOR	100MF 20% 10V	
	CE106	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
	CE107	QFLC1HJ-123ZM	M CAPACITOR	3.3MF 20% 50V	
	CE108	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
	CE201	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	CE202	QCSB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	CE203	QCSB1HK-561Y	C CAPACITOR	560PF 10% 50V	
	CE204	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	CE205	QFLC1HJ-123ZM	M CAPACITOR	100MF 20% 10V	
	CE206	QETC1HM-335Z	E CAPACITOR	.012MF 5% 50V	
	CE207	QFLC1HJ-123ZM	M CAPACITOR	3.3MF 20% 50V	
	CE301	QETC1AM-107ZN	E CAPACITOR	.012MF 5% 50V	
	CE302	QETC1AM-476ZN	E CAPACITOR	100MF 20% 10V	
	CE303	QETC1CM-106ZN	E CAPACITOR	47MF 20% 10V	
	CE304	QCSB1CM-103Y	C CAPACITOR	10MF 20% 16V	
	CE305	QETC1HM-225ZN	E CAPACITOR	.010MF 20% 16V	
	CNE31	QMV5011-003	CONNECTOR	2.2MF 20% 50V	
	CNE32	QMV5011-007	CONNECTOR	A MECHA H.W	
	CN705	VNC0232-S08	CONNECTOR	B MECHA H.W	
	CN706	VNC0232-S08	CONNECTOR	PRE TO MECHASW	
	CN707	VNC0232-P06	CONNECTOR	PRE TO MECHASW	
	CN708	VNC0232-P08	CONNECTOR	MAIN TO PRE	
	CN709	VNC0232-P08	CONNECTOR	MAIN TO PRE	
	CN710	VNC0232-P08	CONNECTOR	MECHASW TO PRE	
	CN711	VNC0234-P04	CONNECTOR	MECHASW TO MECH	
	CN712	VNC0234-P04	CONNECTOR	MECHASW TO MECH	
	CN713	VNC0234-P07	CONNECTOR	MECHASW TO MECH	
	CN714	VNC0234-P07	CONNECTOR	MECHASW TO MECH	
	CR101	QFV41HJ-184	TF CAPACITOR	.18MF 5% 50V	
	CR102	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
	CR103	QFLA1HJ-822ZM	M CAPACITOR	8200PF 5% 50V	
	CR104	QFLA1HJ-822ZM	M CAPACITOR	8200PF 5% 50V	
	CR105	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
	CR107	QFLC1HJ-153ZM	M CAPACITOR	.015MF 5% 50V	
	CR108	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
	CR109	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
	CR110	QETC1HM-335ZN	E CAPACITOR	3.3MF 20% 50V	
	CR111	QCSB1HK-681Y	C CAPACITOR	680PF 10% 50V	
	CR112	QCS31HJ-431Z	C CAPACITOR	430PF 5% 50V	
	CR113	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
	CR114	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V	



REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RR109	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
RR112	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RR113	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RR114	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR115	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR116	QRD161J-474	CARBON RESISTOR	470K 5% 1/6W	
RR117	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RR118	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RR119	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
RR120	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RR121	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR122	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RR201	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RR202	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR203	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
RR204	QRD161J-113	CARBON RESISTOR	15K 5% 1/6W	
RR205	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RR206	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
RR207	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RR208	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RR209	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
RR212	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RR213	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RR214	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR215	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR216	QRD161J-474	CARBON RESISTOR	470K 5% 1/6W	
RR217	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RR218	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RR219	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
RR220	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RR221	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR222	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RR301	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RR302	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RR303	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR304	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR307	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR308	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR309	QRD161J-473	CARBON RESISTOR	4.7M 5% 1/6W	
RR310	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RR311	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
RR312	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RR313	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RR314	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
S 701	VSH1140-005	LEAF SWITCH	A-TAPE	
S 702	VSH1140-005	LEAF SWITCH	A-TOU	
S 703	VSH1140-005	LEAF SWITCH	B-TAPE	
S 704	VSH1140-005	LEAF SWITCH	B-CRO2	
S 706	VSH1140-005	LEAF SWITCH	F-AREC	
S 707	VSH1140-005	LEAF SWITCH	R-AREC	
VR531	QVZ3523-2034Z	V RESISTOR		
VR701	QVPA603-103M	SEMI.V. RESISTOR	MOTOR SPEED	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 701	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 702	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 703	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W	
R 704	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 705	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 706	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 707	QRD161J-552	CARBON RESISTOR	3.3K 5% 1/6W	
R 708	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 709	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 711	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 712	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 713	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 715	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 717	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 718	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 719	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 723	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 724	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 725	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 730	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 734	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RB101	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
RB201	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
RB301	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RB302	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RB303	QRD161J-688	C RESISTOR	6.8 5% 1/6W	
RB304	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RB305	QRD121J-121	C RESISTOR	120 5% 1/2W	
RB306	QRD14C1-470SX	UNF. C-RES-I.M	47 5% 1/4W	
RB307	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RB309	QRZ0077-120X	F.B. RESISTOR	12 1/10W	
RE101	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RE102	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RE103	QRD161J-510	CARBON RESISTOR	51 5% 1/6W	
RE104	QRD161J-113	CARBON RESISTOR	11K 5% 1/6W	
RE105	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RE106	QRD161J-163	CARBON RESISTOR	16K 5% 1/6W	
RE107	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RE108	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RE109	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RE201	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RE202	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RE203	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
RE204	QRD161J-113	CARBON RESISTOR	11K 5% 1/6W	
RE205	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RE206	QRD161J-113	CARBON RESISTOR	11K 5% 1/6W	
RE207	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RE208	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RE209	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RE301	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RE302	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RE303	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
RE304	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RE305	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RE306	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RE307	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RE308	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RR101	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RR102	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RR103	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
RR104	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RR105	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RR106	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
RR107	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RR108	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	

## Power Amplifier/Power Supply P. C. Board

BLOCK NO. 0 2

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 731	QETC1AM-226ZN	E CAPACITOR	22MF 20% 10V	
C 901	QFV41HJ-474	3F CAPACITOR	47MF 5% 50V	
C 902	QCB1CM-222Y	C CAPACITOR	2200PF 20% 16V	
C 903	QCB1CM-103Y	C CAPACITOR	010MF 20% 16V	
C 904	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
C 905	QFV41HJ-224	TF CAPACITOR	22MF 5% 50V	
C 906	QCC11EM-683V	C CAPACITOR	68MF 20% 25V	
C 907	QCB1HK-331Y	C CAPACITOR	330PF 10% 50V	
C 908	QCB1CM-103Y	C CAPACITOR	010MF 20% 16V	
C 909	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
C 917	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V	
C 995	QFV41HJ-104	TF CAPACITOR	FOR PULSE NOISE	
C 996	QCF11HP-103	C CAPACITOR	010MF +100%-0%	
C 997	QCF11HP-103	C CAPACITOR	010MF +100%-0%	
C 998	QCF11HP-103	C CAPACITOR	010MF +100%-0%	
C 999	QCF11HP-103	C CAPACITOR	010MF +100%-0%	
CA101	QEK41HM-474	E CAPACITOR	47MF 20% 50V	
CA102	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V	
CA103	QCC11EM-104V	C CAPACITOR	10MF 20% 25V	
CA104	QETC1CM-107ZN	E CAPACITOR	100MF 20% 16V	
CA105	QCB1HK-101Y	C CAPACITOR	100PF 10% 50V	
CA106	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
CA107	QCC11EM-104V	C CAPACITOR	10MF 20% 25V	
CA108	QETC1CM-107ZN	E CAPACITOR	100MF 20% 16V	
CA109	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
CA111	QETC1CM-226ZN	E CAPACITOR	22MF 20% 16V	
CA112	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V	
CA113	QETC1EM-227ZN	E CAPACITOR	220MF 20% 25V	
CA201	QEK41HM-474	E CAPACITOR	47MF 20% 50V	
CA202	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V	
CA203	QCC11EM-104V	C CAPACITOR	10MF 20% 25V	
CA204	QETC1CM-107ZN	E CAPACITOR	100MF 20% 16V	
CA205	QCB1HK-101Y	C CAPACITOR	100PF 10% 50V	
CA206	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
CA207	QCC11EM-104V	C CAPACITOR	10MF 20% 25V	
CA208	QETC1CM-107ZN	E CAPACITOR	100MF 20% 16V	
CA209	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
CA211	QETC1CM-226ZN	E CAPACITOR	22MF 20% 16V	
CA212	QETC1AM-227ZN	E CAPACITOR	220MF 20% 10V	
CA213	QETC1EM-227ZN	E CAPACITOR	220MF 20% 25V	
CA301	QETB1EM-478E	E CAPACITOR	4700MF 20% 25V	
CA303	QET1CM-227	TF CAPACITOR	FOR HEADPHONE	
CB310	QFV71HJ-154ZM	TF CAPACITOR	15MF 5% 50V	
CF101	QER61HM-335ZM	E CAPACITOR	3.3MF 20% 50V	
CF102	QER61HM-684ZM	E CAPACITOR	68MF 20% 50V	
CF103	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
CF104	QCB1CM-472Y	C CAPACITOR	4700PF 20% 16V	
CF201	QER61HM-335ZM	E CAPACITOR	3.3MF 20% 50V	
CF202	QER61HM-684ZM	E CAPACITOR	68MF 20% 50V	
CF203	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
CF204	QCB1CM-472Y	C CAPACITOR	4700PF 20% 16V	
CF301	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CF302	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CF303	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V	
CF304	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
CF505	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CF506	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V	
CG101	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V	
CG102	QEK41HM-225	E CAPACITOR	2.2MF 20% 50V	
CG103	QFV41HJ-823	TF CAPACITOR	082MF 5% 50V	
CG104	QFV41HJ-823	TF CAPACITOR	082MF 5% 50V	
CG105	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CG106	QETC1AM-226ZN	E CAPACITOR	22MF 20% 10V	
CG108	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
CG109	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	

△ Parts are safety assurance parts.  
When replacing those parts, make sure to use the specified one.

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CG110	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CG111	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CG112	QETC1HM-335ZN	E CAPACITOR	3.3MF 20% 50V	
CG201	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V	
CG202	QEK41HM-225	E CAPACITOR	2.2MF 20% 50V	
CG203	QFV41HJ-823	TF CAPACITOR	082MF 5% 50V	
CG204	QFV41HJ-823	TF CAPACITOR	082MF 5% 50V	
CG205	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CG206	QETC1AM-226ZN	E CAPACITOR	22MF 20% 10V	
CG208	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
CG209	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
CG210	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CG211	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
CG212	QETC1HM-335ZN	E CAPACITOR	3.3MF 20% 50V	
CG301	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
CG302	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V	
CNL 1	VMC0135-007	CONNECTOR	LCD TO SW	
CNL 2	VMC0135-003	CONNECTOR	LCD TO SW	
CNL 3	VMC0136-007	CONNECTOR	SW TO LCD	
CNL 4	VMC0136-003	CONNECTOR	SW TO LCD	
CNL 5	VMC0075-005N	CONNECTOR	LCD TO TUNER	
CNL 6	VMC0163-R13	CONNECTOR	LCD TO CD	
CNL 7	VMC0163-010	CONNECTOR	LCD TO MAIN	
CNL 8	VMC0163-R13	CONNECTOR	LCD TO MAIN	
CNL 9	VMC0107-004	CONNECTOR	LCD TO MAIN	
CNM 1	TTL25V-003	CONNECTOR	MAIN TO LSPK	
CNM 2	TTL25V-003	CONNECTOR	MAIN TO RSPK	
CNM 3	VMC0238-004Z	CONNECTOR	MAIN TO POWSUP	
CNM 4	VMC0163-010	CONNECTOR	MAIN TO LCDCB	
CNM 5	VMC0163-013	CONNECTOR	TUKEI TO MAIN	
CNM 6	VMC0232-S08	CONNECTOR	MAIN TO PRE	
CNM 7	VMC0107-006	CONNECTOR	MAIN TO CD	
CNM 8	VMC0075-004N	CONNECTOR	MAIN TO TUNER	
CNM 9	VMC0232-S06	CONNECTOR	MAIN TO PRE	
CNM10	TTL25V-003	CONNECTOR	TESTPOINT	
D 731	1SS133	DIODE		
D 898	1SS133	DIODE		
D 899	1SS133	DIODE		
D 901	1SS133	DIODE		
D 902	1SS133	DIODE		
D 903	H7S9A1	Z DIODE		
D 904	1SS133	DIODE		
D 905	RDS-6JSAB1	Z DIODE		
D 908	1SR35-100	SI DIODE		
D 996	1N5401M	DIODE		
D 997	1N5401M	DIODE		
D 998	1N5401M	DIODE		
D 999	1N5401M	DIODE		
DF301	1SS133	DIODE		
DF302	MA700	ZENER DIODE		
DF303	1SS133	DIODE		
DG101	1SS133	DIODE		
DG102	1SS133	DIODE		
DG103	1SS133	DIODE		
DG201	1SS133	DIODE		
DG202	1SS133	DIODE		
DG203	1SS133	DIODE		
ICA11	TAB223K	IC	15PIN HEATSINK	
ICA21	TAB223K	IC	15PIN HEATSINK	
ICF31	XRA15218N	IC		
ICG31	BA15218N	IC		
J 999	QMC0263-004	AC SOCKET		
JA301	VMJ4024-001	JACK		
LF301	VQZ0048-009	INDUCTOR		
Q 731	2SA952(L,K)	TRANSISTOR		



REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RF108	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF109	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF110	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF111	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RF112	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RF116	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
RF203	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RF204	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RF205	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RF206	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF207	QRD161J-593	CARBON RESISTOR	39K 5% 1/6W	
RF208	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF209	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RF210	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF211	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RF213	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RF216	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
RF301	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RF302	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF304	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RF305	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RF306	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RF307	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF308	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RF310	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF311	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF312	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RF313	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RF314	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RG101	QRV144D-1002AY	CMF RESISTOR	10 1/4W	
RG102	QRV144D-1002AY	CMF RESISTOR	10 1/4W	
RG103	QRV144D-1002AY	CMF RESISTOR	10 1/4W	
RG104	QRV144D-1002AY	CARBON RESISTOR	220 5% 1/6W	
RG105	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RG106	QRD161J-391	CARBON RESISTOR	390 5% 1/6W	
RG107	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG108	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
RG109	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG110	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG111	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RG112	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG113	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RG114	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
RG115	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG201	QRV144D-1002AY	CMF RESISTOR	10 1/4W	
RG202	QRV144D-1002AY	CMF RESISTOR	10 1/4W	
RG203	QRV144D-1002AY	CMF RESISTOR	10 1/4W	
RG204	QRV144D-1002AY	CARBON RESISTOR	220 5% 1/6W	
RG205	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RG206	QRD161J-391	CARBON RESISTOR	390 5% 1/6W	
RG207	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG208	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
RG209	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG210	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG211	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RG212	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG213	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RG214	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
RG215	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG301	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RG302	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
SB301	QSS7A23-V06	SLIDE SWITCH		

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 732	2SC2785(HFE)	TRANSISTOR	22K 5% 1/6W	
Q 901	2SA1129(K)	TRANSISTOR	10K 5% 1/6W	
Q 902	2SC2785(HFE)	TRANSISTOR	27K 5% 1/6W	
Q 903	2SC2785(HFE)	TRANSISTOR	22K 5% 1/6W	
Q 904	2SC2785(HFE)	TRANSISTOR	470 5% 1/6W	
Q 905	2SA733A(P,Q)	TRANSISTOR	100K 5% 1/6W	
Q 906	2SB772(G,P)	TRANSISTOR	10K 5% 1/6W	
Q 907	2SC2785(HFE)	TRANSISTOR	3.3K 5% 1/6W	
Q 908	2SC2785(HFE)	TRANSISTOR	5.6K 5% 1/6W	
QF101	2SC2785(HFE)	TRANSISTOR	4.7K 5% 1/6W	
QF102	2SC2785(HFE)	TRANSISTOR	39K 5% 1/6W	
QF103	2SC2785(HFE)	TRANSISTOR	470 5% 1/6W	
QF201	2SC2785(HFE)	TRANSISTOR	10K 5% 1/6W	
QF202	2SC2785(HFE)	TRANSISTOR	10K 5% 1/6W	
QF203	2SC2785(HFE)	TRANSISTOR	10K 5% 1/6W	
QF301	2SA1175(HFE)	TRANSISTOR	470 5% 1/6W	
QF303	2SA952(L,K)	TRANSISTOR	470 5% 1/6W	
QF304	2SC2785(HFE)	TRANSISTOR	220K 5% 1/6W	
QF305	2SA952(L,K)	TRANSISTOR	220K 5% 1/6W	
QF306	2SC2785(HFE)	TRANSISTOR	220K 5% 1/6W	
QG101	2SC2785(HFE)	TRANSISTOR	15K 5% 1/6W	
QG102	2SC2785(HFE)	TRANSISTOR	270 5% 1/6W	
QG103	2SC2785(HFE)	TRANSISTOR	100K 5% 1/6W	
QG104	2SC2001(L,K)	TRANSISTOR	8.2K 5% 1/6W	
QG201	2SC2785(HFE)	TRANSISTOR	220 5% 1/6W	
QG202	2SC2001(L,K)	TRANSISTOR	22 5% 1/6W	
R 731	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 732	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 733	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 734	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 901	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 903	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 904	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 906	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 907	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 908	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 909	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 910	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 911	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 912	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 913	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 914	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 915	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 916	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R 917	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 918	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 919	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 920	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R 923	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
RA101	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
RA102	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
RA103	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
RA104	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
RA105	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA106	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RA107	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RA108	QRX12CJ-847AX	MF RESISTOR	5% 1/2W	
RA109	QRD167J-121	CARBON RESISTOR	120 5% 1/6W	
RA201	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
RA202	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
RA203	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
RA204	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
RA205	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA206	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RA207	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RA208	QRX12CJ-847AX	MF RESISTOR	5% 1/2W	
RF103	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RF104	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RF105	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RF106	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RF107	QRD161J-303	CARBON RESISTOR	39K 5% 1/6W	

CD Amplifier P. C. Board

BLOCK NO. 0 3

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 502	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V		
C 505	QCB1HK-471Y	C CAPACITOR	.022MF 10% 50V		
C 506	QCC11EM-223V	C CAPACITOR	.022MF 20% 25V		
C 507	QCS11HJ-480	C CAPACITOR	68PF 5% 50V		
C 508	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V		
C 509	QCS11HJ-480	C CAPACITOR	68PF 5% 50V		
C 510	QCSB1HK-2R2Y	C CAPACITOR	2.2PF 10% 50V		
C 511	QCC11EM-223V	C CAPACITOR	.022MF 20% 25V		
C 512	QCS11HJ-420Y	C CAPACITOR	22PF 5% 50V		
C 513	QCSB1HK-820Y	C CAPACITOR	82PF 10% 50V		
C 514	QCVB1CM-103Y	C CAPACITOR	.010MF 30% 16V		
C 515	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V		
C 516	QCS11HJ-470	C CAPACITOR	47PF 5% 50V		
C 517	QCSB1HK-151Y	C CAPACITOR	150PF 10% 50V		
C 518	QCSB1HK-101Y	C CAPACITOR	100PF 10% 50V		
C 519	QCS11HJ-330	C CAPACITOR	33PF 5% 50V		
C 520	QCSB1CM-152Y	C CAPACITOR	1500PF 20% 16V		
C 521	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V		
C 522	QCSB1HK-221Y	C CAPACITOR	220PF 10% 50V		
C 523	QCSB1HK-221Y	C CAPACITOR	220PF 10% 50V		
C 525	QETC1EM-475	E CAPACITOR	4.7MF 20% 25V		
C 526	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V		
C 527	QEN61HM-105Z	NP-E CAPACITOR	1.0MF 20% 50V		
C 528	QFV41HJ-223	FILM CAPACITOR	.022MF 5% 50V		
C 529	QFV71HJ-273ZM	TF CAPACITOR	.027MF 5% 50V		
C 531	QCV31HK-822Z	C CAPACITOR	8200PF 10% 50V		
C 533	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V		
C 544	QCS11HJ-100	C CAPACITOR	10PF 5% 50V		
C 545	QCS11HJ-100	C CAPACITOR	10PF 5% 50V		
C 547	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V		
C 548	QEK41CM-476	E CAPACITOR	47MF 20% 16V		
C 549	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V		
C 550	QCSB1HK-331Y	C CAPACITOR	330PF 10% 50V		
C 551	QEK40JM-476	E CAPACITOR	47MF 20% 6.3V		
C 552	QEK40JM-476	E CAPACITOR	47MF 20% 6.3V		
C 553	QCY41HK-122	C CAPACITOR	1200PF 10% 50V		
C 554	QEK41CM-106	E CAPACITOR	10MF 20% 16V		
C 555	QCY41HK-122	C CAPACITOR	1200PF 10% 50V		
C 556	QEK40JM-476	E CAPACITOR	47MF 20% 6.3V		
C 557	QCSB1HK-331Y	C CAPACITOR	330PF 10% 50V		
C 563	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V		
C 587	QCVB1CM-103Y	C CAPACITOR	.010MF 30% 16V		
C 591	QCC11EM-223V	C CAPACITOR	.022MF 20% 25V		
C 604	QEK61HM-475ZN	E CAPA.	4.7MF 20% 25V		
C 605	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V		
C 606	QCSB1CM-562Y	C CAPACITOR	5600PF 20% 16V		
C 607	QCSB1CM-562Y	C CAPACITOR	5600PF 20% 16V		
C 608	QCSB1CM-682Y	C CAPACITOR	6800PF 20% 16V		
C 609	QCSB1CM-682Y	C CAPACITOR	6800PF 20% 16V		
C 610	QCS11HJ-480	C CAPACITOR	68PF 5% 50V		
C 611	QCS11HJ-480	C CAPACITOR	68PF 5% 50V		
C 612	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V		
C 613	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V		
C 614	QCVB1CM-103Y	C CAPACITOR	.010MF 30% 16V		
C 615	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V		
C 616	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V		
C 617	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V		
C 618	QFV41HJ-223	TF CAPACITOR	.022MF 5% 50V		
C 620	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V		
C 621	QETC1AM-477ZN	E CAPACITOR	470MF 20% 10V		
C 625	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V		
CN504	VNC0163-013	CONNECTOR			
CN505	VNC0107-002	CONNECTOR			
D 603	1SS133	DIODE			
D 610	RD5.6ES (RB3)	DIODE			

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
IC501	MC13501M	IC			
IC502	NJM3403D-C	IC			
IC503	BA6294	IC			
IC504	BA6294	IC			
IC602	TC9201BF	IC			
IC603	TC9200BF	IC			
IC604	CKX5846PS-15L	SRAM			
IC605	TD6710AF	IC			
IC607	XRA15218N	IC			
L 501	VQ70048-006	EMI FILTER			
L 502	VQ70048-006	EMI FILTER			
L 503	VQ70048-006	EMI FILTER			
L 504	VQ70048-009	INDUCTOR			
L 505	VQ70048-009	INDUCTOR			
L 506	VQ70048-009	INDUCTOR			
Q 501	2SA1175 (HFE)	TRANSISTOR			
Q 503	2SC2785 (HFE)	TRANSISTOR			
Q 504	2SC2785 (HFE)	TRANSISTOR			
Q 505	2SA1175 (HFE)	TRANSISTOR			
Q 614	2SD1302 (S,T)	TRANSISTOR			
R 501	QRD161J-184	CARBON RESISTOR	180K 5% 1/6W		
R 502	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W		
R 503	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W		
R 504	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R 505	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		
R 506	QRD161J-681	CARBON RESISTOR	680 5% 1/6W		
R 507	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R 508	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W		
R 509	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R 510	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 511	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 512	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W		
R 513	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 514	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W		
R 515	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W		
R 516	QRD161J-133	CARBON RESISTOR	15K 5% 1/6W		
R 517	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W		
R 519	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W		
R 520	GRV141F-3302AY	CMF RESISTOR	33 1% 1/4W		
R 521	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W		
R 522	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		
R 523	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W		
R 524	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W		
R 525	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W		
R 526	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W		
R 527	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W		
R 528	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R 529	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 530	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 531	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		
R 532	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W		
R 533	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 534	QRD161J-821	CARBON RESISTOR	820 5% 1/6W		
R 535	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W		
R 536	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R 537	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W		
R 538	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W		
R 539	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W		
R 540	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W		
R 541	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R 542	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W		
R 544	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W		
R 545	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R 546	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R 547	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W		

## System CPU/Display P. C. Board

BLOCK NO. 04

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 548	QRD161J-183	CARBON RESISTOR	68K 5% 1/6W	
R 549	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
R 550	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 559	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 560	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 565	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
R 566	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
R 570	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 573	QRD161J-183	CARBON RESISTOR	180 5% 1/6W	
R 630	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
R 640	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
R 641	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 642	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 643	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R 645	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 647	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 649	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 660	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 661	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 662	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 663	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 664	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 665	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 666	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 667	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 668	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 669	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 672	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 673	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 676	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W	
R 677	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 678	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W	
R 681	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W	
R 682	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W	
R 684	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W	
R 685	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 686	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W	
R 687	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 688	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 690	GRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
R 691	GRV141F-8202AY	CMF RESISTOR	82 1% 1/4W	
R 692	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
R 695	QRV141F-8202AY	CMF RESISTOR	82 1% 1/4W	
R 696	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 697	QRV141F-3302AY	CMF RESISTOR	33 1% 1/4W	
R 698	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 699	PTH61G30B02R2N	POSTER	E/F BALANCE	
VR501	QVPA601-503A	V RESISTOR		
X 601	VCK5016-934V	CRYSTAL		
A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 803	QCB1HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 804	QETCIAM-2272N	E CAPACITOR	220MF 20% 10V	
C 806	QCS11HJ-200	C CAPACITOR	20PF 5% 50V	
C 807	QCS11HJ-160	C CAPACITOR	16PF 5% 50V	
C 808	QCS11HJ-390Z	C CAPACITOR	39PF 5% 50V	
C 813	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 814	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 815	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 816	QCS11HJ-390Z	C CAPACITOR	39PF 5% 50V	
C 817	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
C 818	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
C 819	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 820	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 821	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 824	QER1HM-474ZM	E CAPACITOR	0.47MF 20% 50V	
C 827	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 830	QCB1HK-151Y	C CAPACITOR	150PF 10% 50V	
C 831	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 833	VCRO020-002	C NETWORK	C834-837 724	
CN110	VMC0135-003	CONNECTOR		
CN111	VMC0135-003	CONNECTOR		
CS101	QETCIHM-3352N	E CAPACITOR	3.3MF 20% 50V	
CS102	QER1HM-474ZM	E CAPACITOR	0.47MF 20% 50V	
CS103	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
CS104	QETCIHM-1052N	E CAPACITOR	0.10MF 20% 50V	
CS105	QCC31EM-3932V	C CAPACITOR	0.039MF 20% 25V	
CS106	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
CS201	QETCIHM-3352N	E CAPACITOR	3.3MF 20% 50V	
CS202	QER1HM-474ZM	E CAPACITOR	0.47MF 20% 50V	
CS203	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
CS204	QETCIHM-1052N	E CAPACITOR	0.10MF 20% 50V	
CS205	QCC31EM-3932V	C CAPACITOR	0.039MF 20% 25V	
CS206	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
CS301	QETCIAM-1072N	E CAPACITOR	100MF 20% 10V	
CS302	QETCIAM-1072N	E CAPACITOR	100MF 20% 10V	
CT 02	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
CT 03	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
CT 04	QCB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
CV301	QETCIAM-1062N	E CAPACITOR	10MF 20% 16V	
CV302	QETCIAM-1072N	E CAPACITOR	100MF 20% 10V	
D 801	MA700	ZENER DIODE		
D 802	1SS133	DIODE		
D 803	1SS133	DIODE		
D 805	1SS133	DIODE		
D 806	1SS133	DIODE		
D 807	SLR-34VR70F124	LED		
D 812	1SS133	DIODE		
D 813	1SS133	DIODE		
D 814	1SS133	DIODE		
D 850	LN01301C-LF2	LED		
D 851	LN01301C-LF2	LED		
D 852	LN01301C-LF2	LED		
D 853	LN01301C-LF2	LED		
D 854	LN01301C-LF2	LED		
D 855	LN01301C-LF2	LED		
DT 01	1SS133	DIODE		
DV301	1SS133	DIODE		
ICS31	XRA15218N	IC		
ICT01	MN1280(S)	IC		
ICV31	BA6208A	IC		
IC801	MN1871610JCN-1	CPU		
IC802	MN1280(K)	IC		
IC803	GP1U501X	RM RECIVER		
L 801	VGP025K-4R7Y	INDUCTOR		
L 802	VGP025K-221Y	INDUCTOR		

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	L 803	VQ20048-009	INDUCTOR		
	L 804	VQ0028-1002	INDUCTOR		
	L 812	VQ025K-221Y	INDUCTOR		
	L 814	VQ025K-4R7Y	INDUCTOR		
	L 816	VQ0028-100Z	INDUCTOR		
	Q 801	2SC2785(HFE)	TRANSISTOR		
	Q 802	2SC2785(HFE)	TRANSISTOR		
	Q 803	2SC2785(HFE)	TRANSISTOR		
	Q 8101	2SC2785(HFE)	TRANSISTOR		
	Q 8201	2SC2785(HFE)	TRANSISTOR		
	Q 821	2SC2785(HFE)	TRANSISTOR		
	Q 822	2SA1175(HFE)	TRANSISTOR		
	Q 823	2SC2785(HFE)	TRANSISTOR		
	Q 824	2SC2785(HFE)	TRANSISTOR		
	Q 825	2SA1175(HFE)	TRANSISTOR		
	Q 826	2SC2785(HFE)	TRANSISTOR		
	Q 827	2SC2785(HFE)	TRANSISTOR		
	Q 828	2SC2785(HFE)	TRANSISTOR		
	Q 829	2SC2785(HFE)	TRANSISTOR		
	Q 830	2SC2785(HFE)	TRANSISTOR		
	Q 831	2SC2785(HFE)	TRANSISTOR		
	Q 832	2SC2785(HFE)	TRANSISTOR		
	Q 833	2SC2785(HFE)	TRANSISTOR		
	Q 834	2SC2785(HFE)	TRANSISTOR		
	Q 835	2SC2785(HFE)	TRANSISTOR		
	Q 836	2SC2785(HFE)	TRANSISTOR		
	Q 837	2SC2785(HFE)	TRANSISTOR		
	Q 838	2SC2785(HFE)	TRANSISTOR		
	Q 839	2SC2785(HFE)	TRANSISTOR		
	Q 840	2SC2785(HFE)	TRANSISTOR		
	Q 841	2SC2785(HFE)	TRANSISTOR		
	Q 842	2SC2785(HFE)	TRANSISTOR		
	Q 843	2SC2785(HFE)	TRANSISTOR		
	Q 844	2SC2785(HFE)	TRANSISTOR		
	Q 845	2SC2785(HFE)	TRANSISTOR		
	Q 846	2SC2785(HFE)	TRANSISTOR		
	Q 847	2SC2785(HFE)	TRANSISTOR		
	Q 848	2SC2785(HFE)	TRANSISTOR		
	Q 849	2SC2785(HFE)	TRANSISTOR		
	Q 850	2SC2785(HFE)	TRANSISTOR		
	R 851	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 852	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 853	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 854	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 855	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 856	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 857	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 858	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 859	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 860	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 861	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 862	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 863	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 864	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 865	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 866	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R 867	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R 868	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R 869	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 870	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 871	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 872	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 873	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 874	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	RS101	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	RS102	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	RS103	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	RS104	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	RS105	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	RS106	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	RS107	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	RS108	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	RS110	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	RS201	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	RS202	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	RS203	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	RS204	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	RS205	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	RS206	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	RS207	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	RS208	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	RS210	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	RS301	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	RS302	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	RS303	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	RT 01	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	RT 02	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	RT 03	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	RT 04	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	RT 05	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	RT 06	QRD161J-223	CARBON RESISTOR	2.0K 5% 1/6W	
	RV102	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	RV202	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	RV301	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	RV302	QRD161J-403	CARBON RESISTOR	10K 5% 1/6W	
	S 609	QSP4K11-V01	PUSH SW	CLOSE SWITCH	
	S 750	QS04H11-V01	TACT SWITCH	POWER	
	S 751	QS04H11-V01	TACT SWITCH	*****	
	S 752	QS04H11-V01	TACT SWITCH	TUNER	
	S 753	QS04H11-V01	TACT SWITCH	DOWN	
	S 754	QS04H11-V01	TACT SWITCH	UP	
	S 755	QS04H11-V01	TACT SWITCH	CD PLAY	
	S 756	QS04H11-V01	TACT SWITCH	CD STOP	
	S 757	QS04H11-V01	TACT SWITCH	CD EJECT	
	S 758	QS04H11-V01	TACT SWITCH	A/B	
	S 759	QS04H11-V01	TACT SWITCH	REC	
	S 760	QS04H11-V01	TACT SWITCH	REW	
	S 761	QS04H11-V01	TACT SWITCH	RPLAY	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
S 762	QS4H11-V01	TACT SWITCH	STOP	
S 763	QS4H11-V01	TACT SWITCH	FPLAY	
S 764	QS4H11-V01	TACT SWITCH	FF	
VR331	QVCB12G-V01M	VOL	BASS TREBLE	
VR332	QVCB12G-V01M	VOL	BASS TREBLE	
VRV31	VCV1001-128	V.RESTOR		
X 801	VCS0000-001	CRYSTAL		
X 802	CSAB-00MT	CERA LOCK		

△ Parts are safety assurance parts.  
When replacing those parts, make sure to use the specified one.

BLOCK NO. 0 5

### FM/AM Tuner P. C. Board

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
BP 01	VBP43B-005	BP FILTER		
C 001	QCS11HJ-200	C CAPACITOR	20PF 5% 50V	
C 002	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 003	QCSB1HJ-130Y	C CAPACITOR	13PF 5% 50V	
C 004	QCS11HJ-100	C CAPACITOR	10PF 5% 50V	
C 005	QCT05UJ-100	C CAPACITOR	10PF 5% 50V	
C 006	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 007	QCT30CH-200Y	C CAPACITOR	20PF 5% 50V	
C 008	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 009	QCT05UJ-100	C CAPACITOR	10PF 5% 50V	
C 010	QCT30CH-2R2Y	C CAPACITOR	2.2PF 5% 50V	
C 011	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 012	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
C 013	QCC11EM-223V	C CAPACITOR	.022MF 20% 25V	
C 014	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 015	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 016	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 017	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 018	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 020	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
C 021	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 022	QFP31HG-431ZM	PP CAPACITOR	430PF 2% 50V	
C 023	QCT30CH-150Y	C CAPACITOR	15PF 5% 50V	
C 024	QCS11HJ-470	C CAPACITOR	47PF 5% 50V	
C 025	QETC1HM-104ZN	E CAPACITOR	10MF 20% 50V	
C 026	QFP31HJ-181ZM	PP CAPACITOR	180PF 5% 50V	
C 027	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V	
C 028	QCS11HJ-150	C CAPACITOR	15PF 5% 50V	
C 029	QETC1AM-476ZN	E CAPACITOR	47MF 20% 10V	
C 030	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 031	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 032	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 033	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
C 034	QFLC1HJ-223ZM	M CAPACITOR	.022MF 5% 50V	
C 035	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
C 036	QETC1HM-475ZN	E CAPACITOR	4.7MF 20% 50V	
C 037	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 038	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 039	QCC11EM-473V	E CAPACITOR	.047MF 20% 25V	
C 040	QETC1HM-335ZN	E CAPACITOR	3.3MF 20% 50V	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 041	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
C 042	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 043	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 044	QETC1HM-104ZN	E CAPACITOR	.10MF 20% 50V	
C 045	QETC1HM-474ZN	E CAPACITOR	47MF 20% 50V	
C 046	QETC1CM-106ZN	E CAPACITOR	10MF 20% 16V	
C 047	QCY31HK-822Z	C CAPACITOR	8200PF 10% 50V	
C 048	QCY31HK-822Z	C CAPACITOR	8200PF 10% 50V	
C 049	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
C 050	QETC1HM-105ZN	E CAPACITOR	1.0MF 20% 50V	
C 053	QCT30CH-150Y	C CAPACITOR	15PF 5% 50V	
C 059	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 060	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
C 061	QETC1AM-107ZN	E CAPACITOR	100MF 20% 10V	
C 062	QCS11HJ-100	C CAPACITOR	10PF 5% 50V	
C 063	QCVB1CN-103Y	C CAPACITOR	.010MF 30% 16V	
C 064	QCS11HJ-270	C CAPACITOR	27PF 5% 50V	
C 065	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
C 066	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
C 067	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V	
C 068	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
C 069	QCY81CM-222Y	C CAPACITOR	2200PF 20% 16V	
C 070	QETC1HM-225ZN	E CAPACITOR	2.2MF 20% 50V	
C 071	QETC1HM-335ZN	E CAPACITOR	3.3MF 20% 50V	
CF 01	VCF2L3B-108Z	C FILTER		
CF 02	VCF2L3B-108Z	C FILTER		
CF 03	VCF1Z2-108Z	C FILTER		
CF 04	CSB456F18	CERA LOCK		
CN 01	TTL25V-003	CONNECTOR		
D 001	KV135ONT	VARI CAP		
D 002	KV135ONT	VARI CAP		
D 003	KV135ONT	VARI CAP		
D 004	KV135ONT	VARI CAP		
D 005	1SS133	DIODE		
D 006	1SS133	DIODE		
D 007	1SS133	DIODE		
D 008	KV155ONTA	VARI CAP		
D 009	KV155ONTA	VARI CAP		
D 010	KV155ONTA	VARI CAP		
D 011	KV155ONTA	VARI CAP		
D 012	1SS133	DIODE		
D 013	1SS133	DIODE		
IC 01	TA7358P(N)	IC		
IC 02	TA8132AN	IC		
IC 03	TC9216P	IC		
L 001	VGF1B20-017	OSC COIL	FM OSC	
L 002	VGF1B12-004	RF COIL	FM RF	
L 003	QGB010B-511M	BAR ANTENNA	MW RF	
L 004	QGM7U02-404	OSC COIL(MW)	MW OSC	
L 006	QVL7U02-502	OSC COIL(LW)	LW OSC	
L 007	VGP025K-4R7Y	INDUCTOR		
L 008	VGP025K-221Y	INDUCTOR		
L 009	VGP025K-4R7Y	INDUCTOR		
L 010	VGP025K-4R7Y	INDUCTOR		
L 011	VGP025K-4R7Y	INDUCTOR		
Q 001	2SC1923(CD)	TRANSISTOR		
Q 003	2SC27B5(HFE)	TRANSISTOR		
Q 004	2SA1309(CRS)	TRANSISTOR		
Q 005	2SD1302(S-T)	TRANSISTOR		
Q 006	2SC3311(A(RS))	TR		
Q 007	2SC1923(CD)	TRANSISTOR		
Q 008	DT1144YS	TR.1 M		
Q 009	DTA114YS	TRANSISTOR		
Q 010	DTA114YS	TRANSISTOR		
Q 011	DTA114YS	TRANSISTOR		

■ Reel Motor P. C. Board

BLOCK NO. 06				REMARKS		SUFFIX	
A	REF.	PARTS NO.	PARTS NAME	REMARKS		SUFFIX	
C	1	0EK61CM-336ZN	E.CAPASITOR				
	CN	1 VMC0234-R08	CONN.TERMINAL	DC MOTOR			
	CN	2 DFV11HJ-564Z	TF CAPASITOR				
	R	1 0RD161J-102	C.RESISTOR				
S		VMC0234-R07	CONN.TERMINAL	HOLL IC,CAM			

■ Cam Switch P. C. Board

BLOCK NO. 07				REMARKS		SUFFIX	
A	REF.	PARTS NO.	PARTS NAME	REMARKS		SUFFIX	
CN	2	VMC0107-R07	P.W.B-CONNECTOR				
	H	DN6851A	I.C(DIGI-OTHER)				
	H	VSK3487-002	IC HOLDER				
	SW	VKS3495-00B	CAM SWITCH				
X		VKZ4611-001	EARTH CONTACT				

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q	012	2SC2785(HFE)	TRANSISTOR		
Q	013	2SC2785(HFE)	TRANSISTOR		
Q	014	2SA1309(RS)	TRANSISTOR		
Q	015	DTC124ES	TRANSISTOR		
R	001	0RD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R	002	0RD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R	003	0RD167J-4R7	CARBON RESISTOR	4.7 5% 1/6W	
R	004	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	005	0RD161J-823	CARBON RESISTOR	82K 5% 1/6W	
R	006	0RD161J-101	CARBON RESISTOR	100 5% 1/6W	
R	008	0RD161J-470	CARBON RESISTOR	47 5% 1/6W	
R	009	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	010	0RD161J-101	CARBON RESISTOR	100 5% 1/6W	
R	012	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	013	0RD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R	014	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	015	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	016	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	017	0RD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R	018	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	019	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	020	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	021	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	022	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	023	0RD161J-684	CARBON RESISTOR	680K 5% 1/6W	
R	024	0RD161J-331	CARBON RESISTOR	330 5% 1/6W	
R	025	0RD161J-274	CARBON RESISTOR	270K 5% 1/6W	
R	026	0RD161J-270	CARBON RESISTOR	27 5% 1/6W	
R	027	0RD161J-331	CARBON RESISTOR	330 5% 1/6W	
R	028	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	029	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	030	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	031	0RD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R	032	0RD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R	034	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	035	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	036	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	037	0RD161J-560	CARBON RESISTOR	56 5% 1/6W	
R	040	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	041	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	042	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	043	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	044	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	045	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	047	0RD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R	048	0RD161J-331	CARBON RESISTOR	330 5% 1/6W	
R	049	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	051	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	052	0RD161J-472	CARBON RESISTOR	47K 5% 1/6W	
R	053	0RD161J-471	CARBON RESISTOR	470 5% 1/6W	
R	054	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	055	0RD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R	056	0RD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R	057	0RD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R	058	0RD161J-473	CARBON RESISTOR	47K 5% 1/6W	
A	R 059	0RD161J-470	CARBON RESISTOR	47 5% 1/6W	
T	001	VQ17F12-110	IFT	FM IF	
T	002	VQ17A21-105	IFT		
TC	02	QAT3722-2007M	T CAPACITOR	MW RF	
IC	03	QAT3722-3007M	T CAPACITOR	LW RF	
X	001	V472124-A0	CRYSTAL		



# 13 Illustration of Packing and Parts List

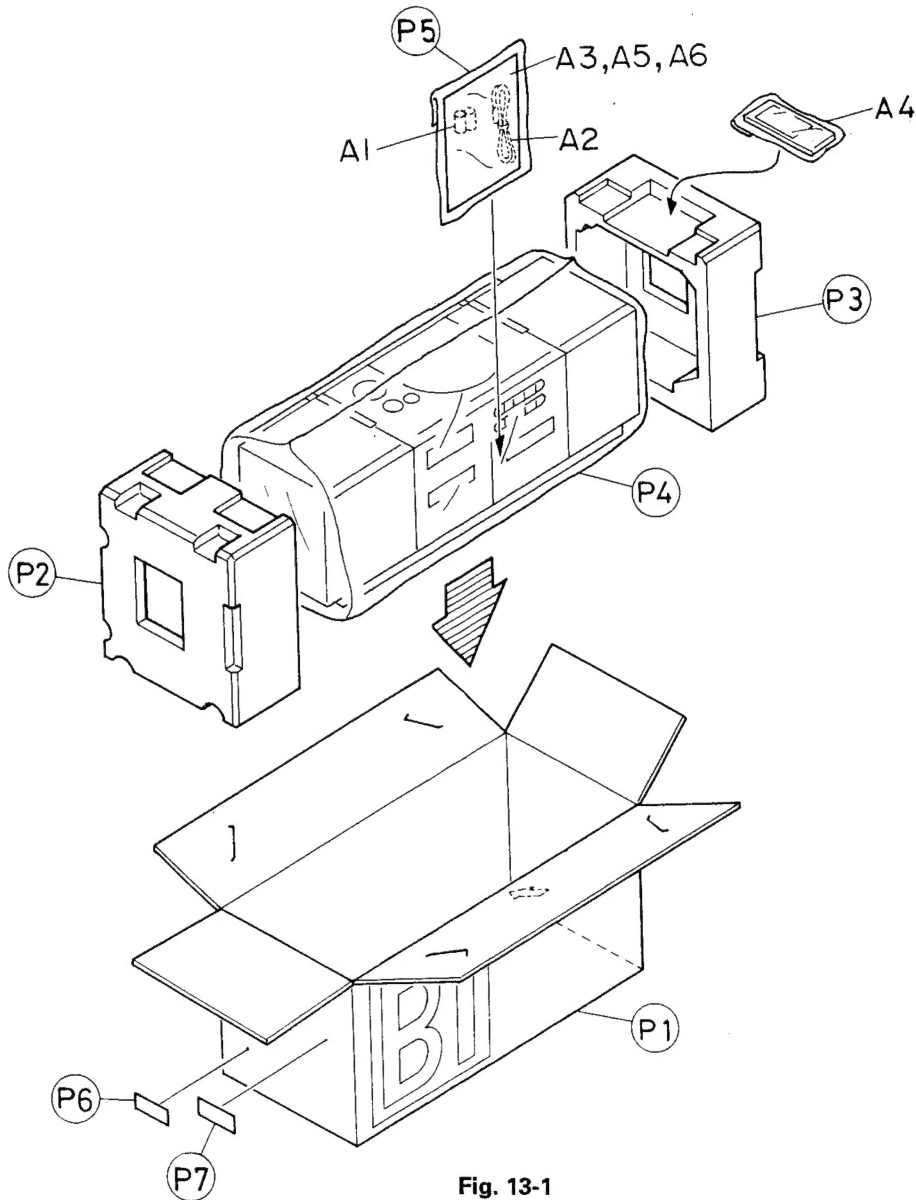


Fig. 13-1

## Packing Parts List

BLOCK NO. <span style="border: 1px solid black; padding: 0 2px;">M7MM</span>								
△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR	
P	1	FSPC3001-002	CARTON		1			
P	2	VPH1564-002	CUSHION(L)		1			
P	3	VPH1565-002	CUSHION(R)		1			
P	4	VPE3020-032	POLY BAG	FOR SET	1			
P	5	VPE3005-007	POLY BAG	INSTRUCTIONS	1			
P	6	VND3044-004	SERIAL TICKET		1	B		
		VND3044-005	SERIAL TICKET		1	G		
		VND3044-003	SERIAL TICKET		1	E		
P	7	VND3025-159	BAR CODE LABEL		1			



# 14 Accessories

BLOCK NO. **M8MM** ☐ ☐ ☐ ☐

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	UM-4NJ-2P	BATTERY		2		
△	A 2	QMP5510-183BS	POWER CORD		1	B	
△		QMP39FO-183	POWER CORD		1	E/G	
	A 3	VNN5158-211	INSTRUCTIONS		1	B	
		VNN5158-251	INSTRUCTIONS	ENGL,SPAN,ITAL	1	B	
		VNN5158-261	INSTRUCTIONS	DUTCH,SPAN,ITAL	1	E/G	
	A 4	VGR0001-101	REMO CON UNIT		1		
	A 5	BT-20066A	WARRANTY CARD		1	B	
		BT20060	WARRANTY CARD		1	B	
		E43486-340B	SAFETY SHEET		1	B	
	A 6	BT-20135	WARRANTY CARD		1	G	
		QZL1008-001	INFORMAT.SHEET		1	G	

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Printed in Japan  
-H0408-S-